United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with New Jersey Agricultural Experiment Station; Rutgers, The State University of New Jersey; New Jersey Department of Agriculture, State Soil Conservation Committee; Gloucester County Board of Freeholders; Gloucester County Planning Department; and Gloucester County Soil Conservation District

Soil Survey of Gloucester County, New Jersey

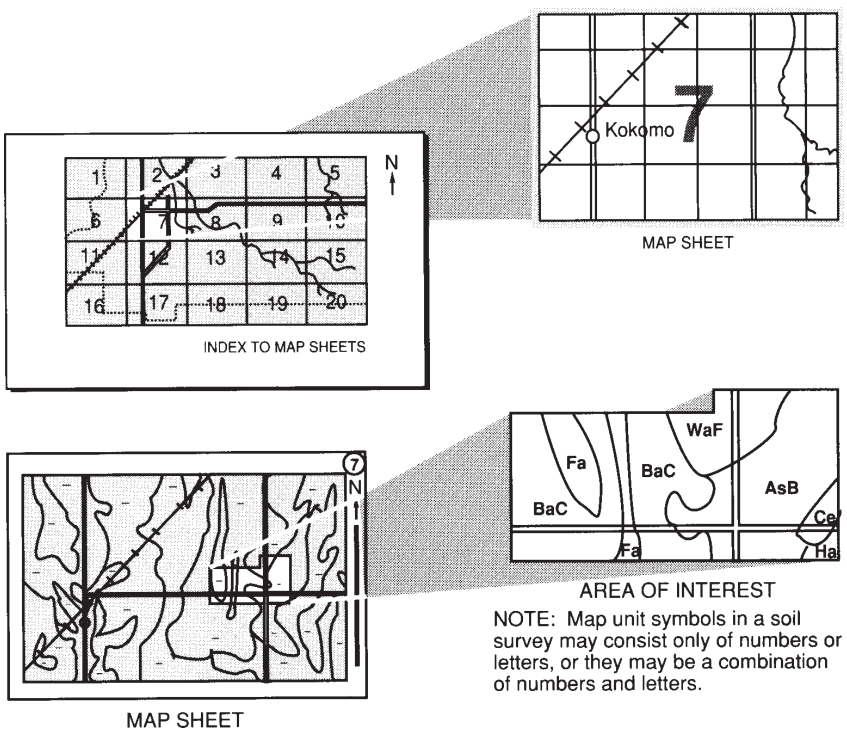
How To Use This Soil Survey

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and go to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Go to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1999. Soil names and descriptions were approved in 2003. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1999. This survey was made cooperatively by the Natural Resources Conservation Service; the New Jersey Agricultural Experiment Station; Rutgers, The State University of New Jersey; the New Jersey Department of Agriculture, State Soil Conservation Committee; the Gloucester County Board of Freeholders; the Gloucester County Planning Department; and the Gloucester County Soil Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

Cover: Mature chrysanthemums growing in an area of Woodstown-Glassboro complex, 0 to 2 percent slopes.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

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Foreword

This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

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Soil Survey of Gloucester County, New Jersey

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Fieldwork by Seth Gladstone and Scott C. Keenan

Manuscript by Scott C. Keenan and Edwin Muñiz

United States Department of Agriculture, Natural Resources Conservation Service,
in cooperation with
the New Jersey Agricultural Experiment Station; Rutgers, the State University of New Jersey; the New Jersey Department of Agriculture, State Soil Conservation Committee; the Gloucester County Board of Freeholders; the Gloucester County Planning Department; and the Gloucester County Soil Conservation District

GLOUCESTER COUNTY is in southern New Jersey (fig. 1). It is along the southeast side of the Delaware River, south of the city of Camden. The county comprises about 215,500 acres, or nearly 337 square miles. It is in the Outer Coastal Plain and Inner Coastal Plain Physiographic Regions.

This soil survey updates an earlier survey of Gloucester County (USDA SCS 1962). It provides a digital soil survey on orthophotography and contains additional interpretive information.

General Nature of the County

This section provides general information about Gloucester County. It describes population, settlement, and climate of the county.

Population

In 2000, Gloucester County had a population of 254,673. The city of Woodbury, the county seat, had a population of 10,307. Among the larger municipalities are the townships of Deptford, Glassboro, Franklin, Monroe, and Washington (U.S. Department of Commerce 2001). Currently, about 55,100 acres, or nearly 26 percent of Gloucester County, has been developed for residential, industrial, commercial, or recreational

Figure 1.—Location of Gloucester County in New Jersey.

uses. The remainder of the acreage is used for agriculture or is woodland, wetland, or open water. Wooded areas account for about 30 percent of the acreage in the county. About 25 percent of the county is used for crops, hay and pasture, or orchards (New Jersey Planning Division 2002). Important agricultural commodities include corn, wheat, soybeans, vegetables, greenhouse crops, nursery stock, flowers, and orchard products. Livestock products are also important to the county. They include beef cattle, dairy products, hogs, sheep, and poultry (USDA, NASS 1997).

Gloucester County is presently one of the fastest growing counties in southern New Jersey. It is in close proximity to the major cities of Philadelphia, Pennsylvania, and Camden, New Jersey, and provides residential living with easily accessible employment opportunities. The county is well connected by an extensive road and highway system.

Settlement

Gloucester County was founded and incorporated in 1686. Originally, the county boundaries included land now contained within the present-day boundaries of Camden and Atlantic Counties. All of Gloucester County, except the tidal flats, was originally forested. The soil resources of the county greatly influenced the nature of these previously undisturbed forests and provided a great variety and abundance of tree species for use by the early colonial settlers. Early forest products included lumber, pitch, tar, charcoal, and resin. Later, trees were cut for fuel needed by rapidly growing industries.

In 1775, a glass factory was established at Glassboro (USDA SCS 1962). By 1800, most of the original forests had been cut and agriculture soon became important for continued growth in the area. Early farmers found the soils of Gloucester County well suited to the production of a variety and abundance of agricultural commodities. As transportation improved, agricultural commodities found new markets in rapidly growing towns and cities along the east coast.

Climate

Prepared by the Water and Climate Center, Natural Resources Conservation Service, Portland, Oregon.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Glassboro, New Jersey, in the period 1963 to 1990. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is 33.2 degrees F and the average daily minimum temperature is 24.8 degrees. The lowest temperature on record, which occurred at Glassboro on January 22, 1984, is -8 degrees. In summer, the average temperature is 73.7 degrees and the average daily maximum temperature is 83.8 degrees. The highest recorded temperature, which occurred at Glassboro on July 4, 1966, is 104 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total average annual precipitation is 44.33 inches. Of this, 27.3 inches, or nearly 62 percent, usually falls in April through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 6.67 inches at Glassboro on August 27, 1971. Thunderstorms occur on about 30 days each year, and most occur in May or August.

The average seasonal snowfall is about 5.7 inches. The greatest snow depth at any one time during the period of record was 19 inches recorded on January 8, 1996. On the average, 11 days of the year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 12.5 inches recorded on February 12, 1983.

The average relative humidity in midafternoon is about 55 percent. Humidity is higher at night, and the average at dawn is about 78 percent. The sun shines 63 percent of the time in summer and 52 percent in winter. The prevailing wind is from the southwest in most months. Average wind speed is highest, around 11 miles per hour, from February to April.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the county. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in Gloucester County are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the county and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the

field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Survey Procedures

The general procedures followed in making this survey are described in the "National Soil Survey Handbook" of the Natural Resources Conservation Service and in the "Soil Survey Manual" (Soil Survey Division Staff 1993; USDA NRCS 1996a).

Before fieldwork began, preliminary boundaries of slopes and landforms were plotted stereoscopically on aerial photographs taken in 1995 at a scale of 1:24,000. U.S. Geological Survey geologic and topographic maps, at a scale of 1:24,000, were also used. Map units were then designed according to the pattern of soils interpreted from aerial photographs, maps, and field observations.

Two levels of mapping intensity were used in this survey. More closely spaced observations were made on the landforms where the soils are used for agriculture, timber production, or urban development. Less closely spaced observations were made in forested wetlands and tidal flats where access was difficult. For either level of mapping intensity, the information about the soils can be used to determine soil management and to predict the suitability of the soils for various uses.

Traverses were made on foot. The soils were examined at intervals ranging from a few hundred feet to about 1/4 mile, depending on the landform and soil pattern. Observations of special features, such as landforms, vegetation, and evidence of flooding, were made continuously without regard to spacing. Soil boundaries were determined on the basis of soil examinations, observations, and aerial photo interpretation. In many areas, such as those where flood plains intersect with knolls, these boundaries are precise because of an abrupt change in the landform. The soils were examined with the aid of a hand probe, a bucket auger, or a spade to a depth of about 3 to 5 feet. The typical pedons were observed in pits dug by hand.

Soil boundaries were plotted stereoscopically on the basis of parent material, landform, and relief. Many of these boundaries cannot be exact because they fall within a zone of gradual change between landforms, such as in an area where the lowest part of a flat begins to become a slight depression. Much intermingling of the soils occurs in these zones.

Samples for chemical and physical analyses were taken from the site of the typical pedon of the major soils in Gloucester County. Data from laboratory tests of samples

of similar soils in nearby areas were also obtained. Analyses were made by the Gloucester County Soil Survey Project Office and by the Soil Survey Laboratory, Lincoln, Nebraska. Commonly used laboratory procedures were followed (USDA NRCS 1996b).

After completion of the soil mapping on aerial photographs, map unit delineations were transferred by hand to orthophotographs at a scale of 1:24,000.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis

of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Colemantown loam, 0 to 2 percent slopes, occasionally flooded, is a phase of the Colemantown series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Buddtown-Deptford complex, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded, is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. The map unit Pits, sand and gravel, is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Information about soil properties, use and management, and the limitations, capabilities, and potentials for many uses are given for each map unit in the “Tables” section of this publication. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

AtsA—Atsion sand, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Atsion and similar soils: 90 percent
Minor components: 10 percent

Description of the Atsion Soil

Typical profile

Surface layer:
Oi—0 to 2 inches; peat
A—2 to 4 inches; sand

Subsurface layer:
E—4 to 26 inches; sand

Subsoil:
Bh—26 to 34 inches; sand

Substratum:
Cg1—34 to 46 inches; sand
Cg2—46 to 51 inches; sand
Cg3—51 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 5w
Hydrologic group: C/D

Minor Components

- The very poorly drained Berryland soils; in small depressions
- The moderately well drained Lakehurst soils; on small knolls

AtsAr—Atsion sand, 0 to 2 percent slopes, rarely flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Drainageways and flats

Composition

Atsion and similar soils: 85 percent
Minor components: 15 percent

Description of the Atsion Soil

Typical profile

Surface layer:
Oi—0 to 2 inches; peat
A—2 to 4 inches; sand

Subsurface layer:
E—4 to 26 inches; sand

Subsoil:
Bh—26 to 34 inches; sand

Substratum:
Cg1—34 to 46 inches; sand
Cg2—46 to 51 inches; sand
Cg3—51 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Ponding depth: 2 to 6 inches above the surface
Seasonal high water table: Within a depth of 12 inches
Flooding: Rare

Interpretive groups

Land capability classification: 5w
Hydrologic group: C/D

Minor Components

- The very poorly drained Berryland soils; in small depressions or in drainageways
- The very poorly drained Manahawkin soils that have a thick organic layer; in small swamps
- The moderately well drained Lakehurst soils; on small knolls

AucB—Aura loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Aura and similar soils: 90 percent
Minor components: 10 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; loamy sand

Subsoil:
Bt—7 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Minor Components

- Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- The moderately well drained Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and do not have a fragipan; on the lower landforms

AugA—Aura sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Aura and similar soils: 80 percent
Minor components: 20 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Minor Components

- Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- Downer soils that do not have a fragipan; on the lower landforms
- The moderately well drained Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and do not have a fragipan; on the lower landforms

AugB—Aura sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Aura and similar soils: 85 percent
Minor components: 15 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- Downer soils that do not have a fragipan; on the lower landforms
- The moderately well drained Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and do not have a fragipan; on the lower landforms

AugC—Aura sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Aura and similar soils: 90 percent
Minor components: 10 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- Downer soils that do not have a fragipan; on the lower landforms

AupB—Aura loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Aura and similar soils: 85 percent
Minor components: 15 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained

Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- The Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- The Downer soils that do not have a fragipan; on the lower landforms
- The moderately well drained Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and do not have a fragipan; on the lower landforms

AvsB—Aura-Sassafras loamy sands, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Aura and similar soils: 65 percent
Sassafras and similar soils: 30 percent
Minor components: 5 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; loamy sand

Subsoil:
Bt1—7 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay and do not have a fragipan; on the lower flats or the lower parts of knolls

AvsC—Aura-Sassafras loamy sands, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Aura and similar soils: 65 percent
Sassafras and similar soils: 30 percent
Minor components: 5 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; loamy sand

Subsoil:
Bt1—7 to 13 inches; coarse sandy loam

Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay and do not have a fragipan; on the lower knolls or on the lower parts of hills

AvtB—Aura-Sassafras sandy loams, 2 to 5 percent slopes

Setting

Slope: Gently sloping (fig. 2)
Landscape: North Atlantic Coastal Plain

Landform: Low hills and knolls

Composition

Aura and similar soils: 60 percent
Sassafras and similar soils: 30 percent
Minor components: 10 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid

Figure 2.—Windrowed wheat straw in an area of Aura-Sassafras sandy loams, 2 to 5 percent slopes, following harvesting of the grain. The straw can be baled for use as livestock bedding or clean mulch.

Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay and do not have a fragipan; on the lower parts of the landform
- The moderately well drained Woodstown soils; on the lower flats or in small drainageways

AvtC—Aura-Sassafras sandy loams, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Aura and similar soils: 65 percent
Sassafras and similar soils: 30 percent
Minor components: 5 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay and do not have a fragipan; on the lower knolls or on the lower parts of hills

AvtC2—Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Aura and similar soils: 65 percent
Sassafras and similar soils: 30 percent
Minor components: 5 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; sandy loam

Subsoil:
Bt1—6 to 11 inches; coarse sandy loam
Bt2—11 to 20 inches; coarse sandy loam
2Btx1—20 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or Bridgeton or Beacon Hill Formation gravelly alluvium derived from arkose, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 15 inches; sandy loam

Bt2—15 to 25 inches; sandy clay loam
BC—25 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay and do not have a fragipan; on the lower knolls or on the lower parts of hills

AvuB—Aura-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Aura and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate

Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Sassafras soils that do not have a fragipan and have a fine-loamy particle-size control section; on the slightly lower parts of similar landforms
- Downer soils that do not have a fragipan; on the lower landforms

AvuC—Aura-Urban land complex, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Aura and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam
2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid

Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Sassafras soils that contain more clay and do not have a fragipan; intermingled with areas of the Aura soil on the landform
- Downer soils that do not have a fragipan; on the lower parts of the landform

BerAr—Berryland sand, 0 to 2 percent slopes, rarely flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions, drainageways, and flats

Composition

Berryland and similar soils: 85 percent
Minor components: 15 percent

Description of the Berryland Soil

Typical profile

Surface layer:
Ag—0 to 11 inches; sand

Subsoil:
Bh—11 to 19 inches; sand
Bg—19 to 32 inches; sand
B'h—32 to 40 inches; sand

Substratum:
Cg1—40 to 44 inches; sand
Cg2—44 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid

Available water capacity: Low
Reaction: Extremely acid to strongly acid
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Rare

Interpretive groups

Land capability classification: 5w
Hydrologic group: B/D

Minor Components

- Atsion soils that do not have the thick surface layer of organically coated sand grains
- Mullica soils that have sandy loam textures throughout the solum
- The frequently flooded Berryland soils; in areas adjacent to streams
- The frequently flooded Manahawkin soils that formed in more than 16 inches of organic material

BEXAS—Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions, drainageways, and flood plains

Composition

Berryland and similar soils: 50 percent
Mullica and similar soils: 40 percent
Minor components: 10 percent

Description of the Berryland Soil

Typical profile

Surface layer:
Ag—0 to 11 inches; sand

Subsoil:
Bh—11 to 19 inches; sand
Bg—19 to 32 inches; sand
B'h—32 to 40 inches; sand

Substratum:
Cg1—40 to 44 inches; sand
Cg2—44 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid to strongly acid
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches

Flooding: Occasional

Interpretive groups

Land capability classification: 5w
Hydrologic group: B/D

Description of the Mullica Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
Ag—2 to 9 inches; sandy loam

Subsoil:
Bg1—9 to 14 inches; sandy loam
Bg2—14 to 28 inches; sandy loam

Substratum:
Cg1—28 to 31 inches; loamy sand
Cg2—31 to 40 inches; sand
Cg3—40 to 80 inches; gravelly loamy sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Sandy fluviomarine deposits or loamy fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Occasional

Interpretive groups

Land capability classification: 4w
Hydrologic group: D

Minor Components

- The very poorly drained, organic Manahawkin soils; on the lower lying landforms
- The poorly drained Atsion soils that do not have an umbric epipedon; on the slightly higher landforms

BumA—Buddtown-Deptford complex, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Buddtown and similar soils: 65 percent
Deptford and similar soils: 30 percent
Minor components: 5 percent

Description of the Buddtown Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; fine sandy loam

Subsoil:
Bt1—9 to 12 inches; very fine sandy loam
Bt2—12 to 26 inches; loam
Bt3—26 to 34 inches; loam

Substratum:
2C1—34 to 41 inches; loamy coarse sand
2C2—41 to 54 inches; loamy sand
2C3—54 to 65 inches; coarse sand
2C4—65 to 80 inches; coarse sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Description of the Deptford Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; very fine sandy loam

Subsoil:
Bt1—8 to 12 inches; very fine sandy loam
Bt2—12 to 22 inches; loam
Btg—22 to 46 inches; very fine sandy loam
BCtg—46 to 50 inches; fine sandy loam

Substratum:
Cg1—50 to 62 inches; fine sandy loam
Cg2—62 to 80 inches; stratified loamy very fine sand and very fine sandy loam

Properties and qualities

Drainage class: Somewhat poorly drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate and moderately rapid
Available water capacity: Very high
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: 12 to 18 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: C

Minor Components

- The poorly drained Jade Run soils; on the lower parts of flats

BuuB—Buddtown-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Buddtown and similar soils: 65 percent
Urban land and similar components: 25 percent
Minor components: 10 percent

Description of the Buddtown Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; fine sandy loam

Subsoil:
Bt1—9 to 12 inches; very fine sandy loam
Bt2—12 to 26 inches; loam
Bt3—26 to 34 inches; loam

Substratum:
2C1—34 to 41 inches; loamy coarse sand
2C2—41 to 54 inches; loamy sand
2C3—54 to 65 inches; coarse sand
2C4—65 to 80 inches; coarse sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The somewhat poorly drained Deptford soils; on the higher parts of the landform
- The poorly drained Jade Run soils; on the lower parts of flats

ChsAt—Chicone silt loam, 0 to 1 percent slopes, frequently flooded

Setting

Slope: Level
Landscape: North Atlantic Coastal Plain
Landform: Flood plains

Composition

Chicone and similar soils: 95 percent
Minor components: 5 percent

Description of the Chicone Soil

Typical profile

Surface layer:
A—0 to 5 inches; silt loam

Substratum:
Cg1—5 to 20 inches; silt loam
Cg2—20 to 28 inches; silt loam
Oe—28 to 65 inches; mucky peat
C'g—65 to 80 inches; sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Loamy alluvium over organic woody materials
Permeability: Moderate to rapid
Available water capacity: Very high
Reaction: Extremely acid to strongly acid
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Frequent

Interpretive groups

Land capability classification: 5w
Hydrologic group: D

Minor Components

- The very poorly drained, organic Manahawkin soils; on the lower lying landforms

CoeAs—Colemantown loam, 0 to 2 percent slopes, occasionally flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions, drainageways, and flats

Composition

Colemantown and similar soils: 90 percent
Minor components: 10 percent

Description of the Colemantown Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; loam

Subsoil:
Btg1—10 to 24 inches; clay
Btg2—24 to 34 inches; sandy clay
BCg—34 to 50 inches; stratified clay loam and sandy clay loam

Substratum:
Cg—50 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Poorly drained
Parent material: Glauconite-bearing fluviomarine deposits
Permeability: Slow to moderate
Available water capacity: Very high
Reaction: Extremely acid to slightly acid
Ponding depth: 0 to 6 inches above the surface
Seasonal high water table: Within a depth of 12 inches
Flooding: Occasional

Interpretive groups

Land capability classification: 3w
Hydrologic group: C/D

Minor Components

- The somewhat poorly drained Kresson soils; on the higher parts of flats
- The moderately well drained Marlton soils; on small knolls or the higher parts of flats

CogB—Collington loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Collington and similar soils: 85 percent
Minor components: 15 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; loamy sand

Subsoil:
Bt1—9 to 22 inches; loam

Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform
- Tinton soils that have a thicker sandy surface layer; on the higher parts of the landform
- The moderately well drained Marlton soils that contain more clay; in small depressions or drainageways

CogC—Collington loamy sand, 5 to 10 percent slopes

Setting

Slope: Gently sloping and strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Collington and similar soils: 90 percent
Minor components: 10 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; loamy sand

Subsoil:
Bt1—9 to 22 inches; loam
Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy fluviomarine deposits

Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3s
Hydrologic group: B

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform
- Tinton soils that have a thicker sandy surface and contain less glauconite; intermingled with areas of the Collington soil on the landform

CokA—Collington sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Collington and similar soils: 85 percent
Minor components: 15 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 22 inches; loam
Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy fluviomarine deposits
Permeability: Moderate and moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform

- The moderately well drained Buddtown soils that contain less clay; on the lower flats and in small depressions
- The moderately well drained Marlton soils that contain more clay; on the lower flats and in small depressions

CokB—Collington sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Collington and similar soils: 90 percent
Minor components: 10 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 22 inches; loam
Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing eolian deposits or glauconite-bearing fluviomarine deposits, or both
Permeability: Moderate and moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform
- The moderately well drained Marlton soils that contain more clay; in small depressions and in drainageways

CokC—Collington sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Collington and similar soils: 90 percent
Minor components: 10 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 22 inches; loam
Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy fluviomarine deposits
Permeability: Moderate and moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform

CopB—Collington-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Collington and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Collington Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 22 inches; loam

Bt2—22 to 30 inches; loam
BC—30 to 38 inches; sandy loam

Substratum:
C1—38 to 43 inches; stratified sandy loam, fine sandy loam, and loamy fine sand
C2—43 to 80 inches; stratified sandy loam, fine sandy loam, and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy fluviomarine deposits
Permeability: Moderate and moderately rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Freehold soils that contain less glauconite; intermingled with areas of the Collington soil on the landform
- The moderately well drained Marlton soils that contain more clay; in the lower depressions or drainageways

CosB—Colts Neck sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Colts Neck and similar soils: 90 percent
Minor components: 10 percent

Description of the Colts Neck Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 25 inches; sandy loam
Bt2—25 to 41 inches; sandy clay loam

BC—41 to 46 inches; channery sandy loam

Substratum:
C1—46 to 65 inches; channery loamy sand
C2—65 to 70 inches; loamy coarse sand
C3—70 to 74 inches; channery loamy sand
C4—74 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy and channery marine deposits or glauconite-bearing loamy and channery fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Freehold soils that contain less ironstone fragments; intermingled with areas of the Colts Neck soil on the landform
- Collington soils that contain less ironstone fragments and more glauconite; on the lower parts of the landform

CosC—Colts Neck sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Colts Neck and similar soils: 90 percent
Minor components: 10 percent

Description of the Colts Neck Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 25 inches; sandy loam
Bt2—25 to 41 inches; sandy clay loam
BC—41 to 46 inches; channery sandy loam

Substratum:
C1—46 to 65 inches; channery loamy sand
C2—65 to 70 inches; loamy coarse sand
C3—70 to 74 inches; channery loamy sand
C4—74 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy and channery marine deposits or glauconite-bearing loamy and channery fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Freehold soils that contain less ironstone fragments; intermingled with areas of the Colts Neck soil on the landform
- Collington soils that contain less ironstone fragments and more glauconite; on the lower parts of the landform

DocB—Downer loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping (fig. 3)
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Downer and similar soils: 80 percent
Minor components: 20 percent

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; loamy sand

Subsoil:
BA—10 to 16 inches; loamy sand
Bt—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Figure 3.—An area of Downer loamy sand, 0 to 5 percent slopes, used for tomatoes. A high level of management is needed to produce high yields and high quality of most vegetable crops.

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Minor Components

- Sassafras soils that have a fine-loamy particle-size control section; on similar landforms
- Evesboro soils that have a sandy particle-size control section and do not have an argillic horizon; on the slightly higher landforms
- Hammonton soils that have low-chroma depletions and a seasonal high water table at a depth of 18 to 42 inches; in the lower lying positions

DocC—Downer loamy sand, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Downer and similar soils: 90 percent
Minor components: 10 percent

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; loamy sand

Subsoil:
BA—10 to 16 inches; loamy sand
Bt—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Sassafras soils that have a fine-loamy particle-size control section; on similar landforms
- Evesboro soils that have a sandy particle-size control section and do not have an argillic horizon; on the slightly higher landforms

DoeA—Downer sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Downer and similar soils: 85 percent
Minor components: 15 percent

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 16 inches; sandy loam

Bt2—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Minor Components

- Sassafras soils that have a fine-loamy particle-size control section; on similar landforms
- Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and have a fine-loamy particle-size control section; on similar landforms

DoeB—Downer sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Downer and similar soils: 90 percent
Minor components: 10 percent

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 16 inches; sandy loam
Bt2—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High

Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Sassafras soils that have a fine-loamy particle-size control section; on similar landforms
- Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and a fine-loamy particle-size control section; on similar landforms

DouB—Downer-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Downer and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 16 inches; sandy loam
Bt2—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical

sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Sassafras soils that have a fine-loamy particle-size control section; on similar landforms
- Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches and a fine-loamy particle-size control section; on similar landforms

EveB—Evesboro sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Evesboro and similar soils: 80 percent
Minor components: 20 percent

Description of the Evesboro Soil

Typical profile

Surface layer:
A—0 to 4 inches; sand

Subsurface layer:
AB—4 to 17 inches; sand

Subsoil:
Bw—17 to 31 inches; sand

Substratum:
C—31 to 80 inches; stratified loamy sand and sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy eolian deposits or sandy fluviomarine deposits, or both
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Minor Components

- Downer soils that have a coarse-loamy particle-size control section and an argillic horizon; on similar landforms

- The poorly drained Atsion soils that have a seasonal high water table within a depth of 12 inches; on similar landforms
- The moderately well drained Lakehurst soils that have a seasonal high water table at a depth of 18 to 42 inches and a thin spodic horizon; on the lower lying landforms
- The very poorly drained Mullica soils; in the broad, nearly level areas adjacent to swamps and at the bottom of closed depressions at levels directly above the tidal mark

EveC—Evesboro sand, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Evesboro and similar soils: 95 percent
Minor components: 5 percent

Description of the Evesboro Soil

Typical profile

Surface layer:
A—0 to 4 inches; sand

Subsurface layer:
AB—4 to 17 inches; sand

Subsoil:
Bw—17 to 31 inches; sand

Substratum:
C—31 to 80 inches; stratified loamy sand and sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy eolian deposits or sandy fluviomarine deposits, or both
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Minor Components

- Downer soils that have a coarse-loamy particle-size control section and an argillic horizon; on similar landforms

EveE—Evesboro sand, 15 to 25 percent slopes

Setting

Slope: Steep
Landscape: North Atlantic Coastal Plain

Landform: Low hills and knolls

Composition

Evesboro and similar soils: 95 percent
Minor components: 5 percent

Description of the Evesboro Soil

Typical profile

Surface layer:
A—0 to 4 inches; sand

Subsurface layer:
AB—4 to 17 inches; sand

Subsoil:
Bw—17 to 31 inches; sand

Substratum:
C—31 to 80 inches; stratified loamy sand and sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy eolian deposits or sandy fluviomarine deposits, or both
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Minor Components

- The well drained Westphalia soils that have a loamy subsoil; intermingled with areas of the Evesboro soil on hills

EvuB—Evesboro-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Evesboro and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Evesboro Soil

Typical profile

Surface layer:
A—0 to 4 inches; sand

Subsurface layer:
AB—4 to 17 inches; sand

Subsoil:
Bw—17 to 31 inches; sand

Substratum:
C—31 to 80 inches; stratified loamy sand and sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy eolian deposits or sandy fluviomarine deposits, or both
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Downer soils that have a coarse-loamy particle-size control section and an argillic horizon; on similar landforms
- The moderately well drained Lakehurst soils that have a seasonal high water table at a depth of 18 to 42 inches and a thin spodic horizon; on the lower lying landforms

FamA—Fallsington sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Fallsington and similar soils: 85 percent
Minor components: 15 percent

Description of the Fallsington Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
A—2 to 5 inches; sandy loam

Subsurface layer:
E—5 to 8 inches; sandy loam

Subsoil:
Btg1—8 to 14 inches; sandy loam
Btg2—14 to 31 inches; sandy clay loam

Substratum:
Cg1—31 to 62 inches; sand
Cg2—62 to 80 inches; gravelly sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Seasonal high water table: Within a depth of 12 inches (fig. 4)

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Minor Components

- The very poorly drained Mullica soils that are coarse-loamy and have a seasonal high water table at or near the surface; in the lower lying positions

Figure 4.—Hydrophytic vegetation is dominant in this area of Fallsington sandy loam, 0 to 2 percent slopes. This type of vegetation is specially adapted to the prolonged, wet soil conditions common in areas of the Fallsington soil.

- Woodstown soils that have a seasonal high water table at a depth of 18 to 42 inches; on the slightly higher lying landforms
- The very poorly drained, organic Manahawkin soils that have a seasonal high water table at or near the surface; in the lower lying positions

FapA—Fallsington loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Fallsington and similar soils: 85 percent
Minor components: 15 percent

Description of the Fallsington Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
A—2 to 5 inches; loam

Subsurface layer:
E—5 to 8 inches; sandy loam

Subsoil:
Btg1—8 to 14 inches; sandy loam
Btg2—14 to 31 inches; sandy clay loam

Substratum:
Cg1—31 to 62 inches; sand
Cg2—62 to 80 inches; gravelly sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Minor Components

- The very poorly drained Mullica soils in small depressions or drainageways
- The very poorly drained Manahawkin soils that have thick organic layers; in small swamps or on small flood plains
- The moderately well drained Woodstown soils; on small knolls

FauB—Fallsington-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Fallsington and similar soils: 75 percent
Urban land and similar components: 20 percent
Minor components: 5 percent

Description of the Fallsington Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
A—2 to 5 inches; sandy loam

Subsurface layer:
E—5 to 8 inches; sandy loam

Subsoil:
Btg1—8 to 14 inches; sandy loam
Btg2—14 to 31 inches; sandy clay loam

Substratum:
Cg1—31 to 62 inches; sand
Cg2—62 to 80 inches; gravelly sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The very poorly drained Mullica soils; in small depressions or drainageways

FmhAt—Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded

Setting

Slope: Nearly level
Landscape: River valley
Landform: Flood plains

Composition

Fluvaquents and similar soils: 90 percent
Minor components: 10 percent

Description of the Fluvaquents

Typical profile

Surface layer:
A1—0 to 5 inches; loam
A2—5 to 12 inches; silt loam

Substratum:
C1—12 to 18 inches; sandy clay loam
C2—18 to 24 inches; sandy clay loam
C3—24 to 60 inches; sandy loam

Properties and qualities

Drainage class: Poorly drained
Parent material: Recent alluvium
Permeability: Moderate and moderately rapid
Available water capacity: Moderate
Reaction: Strongly acid to neutral
Ponding depth: 0 to 6 inches above the surface
Seasonal high water table: Within a depth of 18 inches
Flooding: Frequent

Interpretive groups

Land capability classification: 5w
Hydrologic group: B/D

Minor Components

- Soils that are drier than the Fluvaquents; in the higher landscape positions

FrfB—Freehold loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 80 percent
Minor components: 20 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; loamy sand

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform
- Tinton soils that have a thicker sandy surface layer; on the higher parts of the landform

FrfC—Freehold loamy sand, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 85 percent
Minor components: 15 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; loamy sand

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam

Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform
- Tinton soils that have a thicker sandy surface layer; on the higher parts of the landform

FrkA—Freehold sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Freehold and similar soils: 90 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid

Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Minor Components

- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform
- The moderately well drained Woodstown soils; on the lower flats and in drainageways

FrkB—Freehold sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 85 percent
Minor components: 15 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform

- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

FrkC—Freehold sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 90 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

FrkD—Freehold sandy loam, 10 to 15 percent slopes

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Freehold and similar soils: 90 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; sandy loam

Subsoil:
Bt1—7 to 11 inches; sandy loam
Bt2—11 to 18 inches; sandy clay loam
Bt3—18 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

FrkD2—Freehold sandy loam, 10 to 15 percent slopes, eroded

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Freehold and similar soils: 90 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; sandy loam

Subsoil:
Bt1—7 to 11 inches; sandy loam
Bt2—11 to 18 inches; sandy clay loam
Bt3—18 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

FrkE—Freehold sandy loam, 15 to 25 percent slopes

Setting

Slope: Steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Freehold and similar soils: 85 percent
Minor components: 15 percent

Description of the Freehold Soil

Typical profile

Surface layer:
A—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both

Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 6e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform
- Westphalia soils that contain less clay and do not contain glauconite; intermingled with areas of the Freehold soil on the landform

FrkF—Freehold sandy loam, 25 to 40 percent slopes

Setting

Slope: Very steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Freehold and similar soils: 85 percent
Minor components: 15 percent

Description of the Freehold Soil

Typical profile

Surface layer:
A—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform
- Westphalia soils that contain less clay and do not contain glauconite; intermingled with areas of the Freehold soil on the landform

FrrB—Freehold-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

FrrC—Freehold-Urban land complex, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Freehold and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical

sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Freehold soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Freehold soil on the landform

HbmB—Hammonton loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Hammonton and similar soils: 80 percent
Minor components: 20 percent

Description of the Hammonton Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; loamy sand

Subsurface layer:
E—8 to 18 inches; loamy sand

Subsoil:
Bt—18 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Coarse-loamy fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: B

Minor Components

- Downer soils that have a seasonal high water table at a depth of more than 72 inches; on the slightly higher landforms
- Glassboro soils that have a seasonal high water table between depths of 12 and 18 inches; on the slightly higher landforms

HbrB—Hammonton-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: Upland Coastal Plain
Landform: Flats

Composition

Hammonton and similar soils: 70 percent
Urban land and similar components: 20 percent
Minor components: 10 percent

Description of the Hammonton Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; loamy sand

Subsurface layer:
E—8 to 18 inches; loamy sand

Subsoil:
Bt—18 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Coarse-loamy fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Downer soils that have a seasonal high water table at a depth of more than 72 inches; on the slightly higher landforms
- Glassboro soils that have a seasonal high water table between depths of 12 and 18 inches; on the slightly higher landforms

JdrA—Jade Run fine sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Jade Run and similar soils: 90 percent
Minor components: 10 percent

Description of the Jade Run Soil

Typical profile

Surface layer:
Ap—0 to 11 inches; fine sandy loam

Subsoil:
Bg1—11 to 19 inches; very fine sandy loam
Bg2—19 to 23 inches; very fine sandy loam
Bg3—23 to 28 inches; very fine sandy loam
Bg4—28 to 35 inches; very fine sandy loam
BCg—35 to 52 inches; very fine sandy loam

Substratum:
2Cg—52 to 65 inches; sand
2C—65 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to neutral
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Minor Components

- The somewhat poorly drained Deptford soils; on the slightly higher flats and knolls
- The very poorly drained Mullica soils; in the lower depressions and in drainageways

JduA—Jade Run-Urban land complex, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats

Composition

Jade Run and similar soils: 75 percent
Urban land and similar components: 15 percent
Minor components: 10 percent

Description of the Jade Run Soil

Typical profile

Surface layer:
Ap—0 to 11 inches; fine sandy loam

Subsoil:
Bg1—11 to 19 inches; very fine sandy loam
Bg2—19 to 23 inches; very fine sandy loam
Bg3—23 to 28 inches; very fine sandy loam
Bg4—28 to 35 inches; very fine sandy loam
BCg—35 to 52 inches; very fine sandy loam

Substratum:
2Cg—52 to 65 inches; sand
2C—65 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to neutral
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The somewhat poorly drained Deptford soils; on the slightly higher flats and knolls
- The very poorly drained Mullica soils; in the lower depressions and in drainageways

KemB—Keyport sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Keyport and similar soils: 85 percent
Minor components: 15 percent

Description of the Keyport Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; clay
Bt2—18 to 24 inches; clay
Bt3—24 to 32 inches; clay
Bt4—32 to 41 inches; clay

Substratum:
Cg1—41 to 55 inches; silty clay loam
Cg2—55 to 80 inches; silty clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Silty and clayey eolian deposits or silty and clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: Very high
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2e
Hydrologic group: C

Minor Components

- The well drained Sassafras soils; on the slightly higher knolls
- The poorly drained Lenni soils; on the lower flats and in depressions

KemC2—Keyport sandy loam, 5 to 10 percent slopes, eroded

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Keyport and similar soils: 95 percent
Minor components: 5 percent

Description of the Keyport Soil

Typical profile

Surface layer:
Ap—0 to 9 inches; sandy loam

Subsoil:
Bt1—9 to 15 inches; clay
Bt2—15 to 21 inches; clay
Bt3—21 to 32 inches; clay
Bt4—32 to 41 inches; clay

Substratum:
Cg1—41 to 55 inches; silty clay loam
Cg2—55 to 80 inches; silty clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Silty and clayey eolian deposits or silty and clayey fluviomarine deposits, or both
Permeability: Slow to moderate
Available water capacity: Very high
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 3e
Hydrologic group: C

Minor Components

- The well drained Sassafras soils; on the slightly higher knolls

KeoA—Keyport loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Keyport and similar soils: 80 percent
Minor components: 20 percent

Description of the Keyport Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loam

Subsoil:
Bt1—12 to 18 inches; clay
Bt2—18 to 24 inches; clay
Bt3—24 to 32 inches; clay
Bt4—32 to 41 inches; clay

Substratum:
Cg1—41 to 55 inches; silty clay loam
Cg2—55 to 80 inches; silty clay loam

Properties and qualities

Drainage class: Moderately well drained

Parent material: Silty and clayey eolian deposits or silty and clayey fluviomarine deposits, or both
Permeability: Slow to moderate
Available water capacity: Very high
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Minor Components

- The poorly drained Lenni soils; on the lower flats and intermingled with areas of the Keyport soil in depressions
- The poorly drained Fallsington soils that have a lower clay content; on the lower flats and in depressions
- The well drained Sassafras soils; on the slightly higher knolls

KeuB—Keyport-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Keyport and similar soils: 70 percent
Urban land and similar components: 20 percent
Minor components: 10 percent

Description of the Keyport Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; clay
Bt2—18 to 24 inches; clay
Bt3—24 to 32 inches; clay
Bt4—32 to 41 inches; clay

Substratum:
Cg1—41 to 55 inches; silty clay loam
Cg2—55 to 80 inches; silty clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Silty and clayey eolian deposits or silty and clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: Very high

Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The poorly drained Lenni soils; on the lower flats and in depressions
- The poorly drained Fallsington soils that have a lower content of clay; on the lower flats and in depressions

KreA—Kresson fine sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Kresson and similar soils: 85 percent
Minor components: 15 percent

Description of the Kresson Soil

Typical profile

Surface layer:
A—0 to 6 inches; fine sandy loam

Subsoil:
Bt1—6 to 18 inches; clay
Bt2—18 to 33 inches; clay
Bt3—33 to 41 inches; clay

Substratum:
C—41 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Somewhat poorly drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: Very high
Reaction: Extremely acid to strongly acid

Depth to the seasonal high water table: 12 to 18 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: C

Minor Components

- The moderately well drained Marlton soils; on the higher flats and knolls
- The poorly drained Colemantown soils; in the lower drainageways and depressions

LakB—Lakehurst sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Lakehurst and similar soils: 85 percent
Minor components: 15 percent

Description of the Lakehurst Soil

Typical profile

Surface layer:
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 4 inches; sand

Subsurface layer:
E—4 to 18 inches; sand

Subsoil:
Bh—18 to 32 inches; sand
BC—32 to 45 inches; sand

Substratum:
C—45 to 54 inches; sand
Cg—54 to 80 inches; sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid (fig. 5)
Depth to the seasonal high water table: 18 to 42 inches

Figure 5.—Pitch pine, which is the dominant tree species in this area of Lakehurst sand, 0 to 5 percent slopes, can withstand the acid, droughty condition of the soil.

Interpretive groups

Land capability classification: 4w
Hydrologic group: A

Minor Components

- The poorly drained Atsion soils that have a seasonal high water table within a depth of 12 inches; in the slightly lower lying positions
- The somewhat excessively drained Quakerbridge soils; on low hills, flats, or fluviomarine terraces

LasB—Lakewood sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Lakewood and similar soils: 85 percent
Minor components: 15 percent

Description of the Lakewood Soil

Typical profile

Surface layer:
A—0 to 3 inches; sand

Subsurface layer:
E—3 to 11 inches; sand

Subsoil:
Bh—11 to 13 inches; loamy sand
BC—13 to 30 inches; sand

Substratum:
C1—30 to 46 inches; sand
C2—46 to 80 inches; sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Minor Components

- The moderately well drained Lakehurst soils that have a seasonal high water table at a depth of 18 to 42 inches; in the lower lying landscape positions
- The somewhat excessively drained Quakerbridge soils; on low hills, flats, and fluviomarine terraces

LatvB—Lakewood-Quakerbridge complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Lakewood and similar soils: 65 percent
Quakerbridge and similar soils: 30 percent
Minor components: 5 percent

Description of the Lakewood Soil

Typical profile

Surface layer:
A—0 to 3 inches; sand

Subsurface layer:
E—3 to 11 inches; sand

Subsoil:
Bh—11 to 13 inches; loamy sand
BC—13 to 30 inches; sand

Substratum:
C1—30 to 46 inches; sand
C2—46 to 80 inches; sand

Properties and qualities

Drainage class: Excessively drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid and very strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Description of the Quakerbridge Soil

Typical profile

Surface layer:
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; sand

Subsurface layer:
E—3 to 20 inches; sand

Subsoil:
Bh—20 to 24 inches; loamy sand
BC—24 to 42 inches; sand

Substratum:
C—42 to 54 inches; sand
Cg—54 to 80 inches; sand

Properties and qualities

Drainage class: Somewhat excessively drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 6s
Hydrologic group: A

Minor Components

- The moderately well drained Lakehurst soils; on the lower flats

LenA—Lenni loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Lenni and similar soils: 90 percent
Minor components: 10 percent

Description of the Lenni Soil

Typical profile

Surface layer:
Ap—0 to 5 inches; loam

Subsoil:
Btg1—5 to 10 inches; clay loam
Btg2—10 to 18 inches; clay
Btg3—18 to 33 inches; clay loam

Substratum:
2Cg1—33 to 45 inches; sandy loam
2Cg2—45 to 80 inches; sandy loam

Properties and qualities

Drainage class: Poorly drained
Parent material: Clayey fluviomarine deposits
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 4w
Hydrologic group: C/D

Minor Components

- The very poorly drained Mullica soils that contain less clay; on the lower flats and in depressions
- The moderately well drained Keyport soils; on the higher knolls and flats

MakAt—Manahawkin muck, 0 to 2 percent slopes, frequently flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flood plains and swamps

Composition

Manahawkin and similar soils: 85 percent
Minor components: 15 percent

Description of the Manahawkin Soil

Typical profile

Surface layer:
Oa1—0 to 13 inches; muck
Oa2—13 to 26 inches; muck
Oa3—26 to 47 inches; muck

Substratum:
2Cg—47 to 80 inches; sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Organic, woody material over sandy alluvium
Permeability: Rapid
Available water capacity: Very high
Reaction: Very strongly acid to moderately acid
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Frequent

Interpretive groups

Land capability classification: 7w
Hydrologic group: D

Minor Components

- The poorly drained Atsion soils, which are mineral soils with a spodic horizon and a sandy particle-size control section; on the higher landforms
- The very poorly drained Berryland soils, which are mineral soils with a spodic horizon and a sandy particle-size control section; on the slightly higher landforms
- The very poorly drained Mullica soils, which are mineral soils with a coarse-loamy particle-size control section; on the slightly higher landforms

MamnAv—Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded

Setting

Slope: Level
Landscape: North Atlantic Coastal Plain
Landform: Tidal flats

Composition

Mannington and similar soils: 55 percent
Nanticoke and similar soils: 35 percent
Minor components: 10 percent

Description of the Mannington Soil

Typical profile

Surface layer:
Ag—0 to 14 inches; mucky silt loam

Substratum:
Cg—14 to 32 inches; silt loam
Oa—32 to 42 inches; muck
Oe—42 to 52 inches; mucky peat
C'g1—52 to 62 inches; mucky silt loam
C'g2—62 to 90 inches; silt loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Silty estuarine deposits over organic, herbaceous materials
Permeability: Moderately slow and moderate
Available water capacity: Very high
Reaction: Moderately acid to neutral
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Very frequent

Interpretive groups

Land capability classification: 8w
Hydrologic group: D

Description of the Nanticoke Soil

Typical profile

Surface layer:
Ag—0 to 5 inches; mucky silt loam

Substratum:
Cg1—5 to 50 inches; silt loam
Cg2—50 to 80 inches; silt loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Silty estuarine deposits
Permeability: Moderately slow
Available water capacity: Very high

Reaction: Moderately acid to neutral
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Very frequent

Interpretive groups

Land capability classification: 8w
Hydrologic group: D

Minor Components

- Udorthents; in areas disturbed by human activity
- Water

MamuAv—Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded

Setting

Slope: Level
Landscape: North Atlantic Coastal Plain
Landform: Tidal flats

Composition

Mannington and similar soils: 40 percent
Nanticoke and similar soils: 35 percent
Udorthents and similar soils: 20 percent
Minor components: 5 percent

Description of the Mannington Soil

Typical profile

Surface layer:
Ag—0 to 14 inches; mucky silt loam

Substratum:
Cg—14 to 32 inches; silt loam
Oa—32 to 42 inches; muck
Oe—42 to 52 inches; mucky peat
C'g1—52 to 62 inches; mucky silt loam
C'g2—62 to 90 inches; silt loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Silty estuarine deposits over organic, herbaceous materials
Permeability: Moderately slow and moderate
Available water capacity: Very high
Reaction: Moderately acid to neutral
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Very frequent

Interpretive groups

Land capability classification: 8w
Hydrologic group: D

Description of the Nanticoke Soil

Typical profile

Surface layer:
Ag—0 to 5 inches; mucky silt loam

Substratum:
Cg1—5 to 50 inches; silt loam
Cg2—50 to 80 inches; silt loam

Properties and qualities

Drainage class: Very poorly drained
Parent material: Silty estuarine deposits
Permeability: Moderately slow
Available water capacity: Very high
Reaction: Moderately acid to neutral
Ponding depth: 0 to 12 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Very frequent

Interpretive groups

Land capability classification: 8w
Hydrologic group: D

Description of the Udorthents

Typical profile

Substratum:
C—0 to 60 inches; silt loam

Properties and qualities

Parent material: Loamy material transported by human activity
Permeability: Moderately slow
Available water capacity: High
Reaction: Moderately acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 7s
Hydrologic group: D

Minor Components

- Water

MaoB—Marlton sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Marlton and similar soils: 80 percent
Minor components: 20 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 20 inches; clay
Bt2—20 to 28 inches; clay
Bt3—28 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2e
Hydrologic group: C

Minor Component

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on knolls
- The somewhat poorly drained Kresson soils; on the lower parts of flats and in small depressions
- The well drained Freehold soils that contain less clay and glauconite; intermingled with areas of the Marlton soil on knolls

MaoC—Marlton sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Marlton and similar soils: 90 percent
Minor components: 10 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 20 inches; clay
Bt2—20 to 28 inches; clay
Bt3—28 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 3e
Hydrologic group: C

Minor Components

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on the landform
- The well drained Freehold soils that contain less clay and glauconite; intermingled with areas of the Marlton soil on the landform

MaoC2—Marlton sandy loam, 5 to 10 percent slopes, eroded

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Marlton and similar soils: 95 percent
Minor components: 5 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; sandy loam

Subsoil:
Bt1—7 to 17 inches; clay
Bt2—17 to 25 inches; clay
Bt3—25 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High

Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 3e
Hydrologic group: C

Minor Components

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on the landform

MaoD—Marlton sandy loam, 10 to 15 percent slopes

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Marlton and similar soils: 90 percent
Minor components: 10 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 20 inches; clay
Bt2—20 to 28 inches; clay
Bt3—28 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 4e
Hydrologic group: C

Minor Components

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on the landform
- The well drained Freehold soils that contain less clay and glauconite; intermingled with areas of the Marlton soil on the landform

MaoD2—Marlton sandy loam, 10 to 15 percent slopes, eroded

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Marlton and similar soils: 90 percent
Minor components: 10 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 7 inches; sandy loam

Subsoil:
Bt1—7 to 17 inches; clay
Bt2—17 to 25 inches; clay
Bt3—25 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 4e
Hydrologic group: C

Minor Components

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on the landform

MauB—Marlton-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Marlton and similar soils: 55 percent
Urban land and similar components: 35 percent

Minor components: 10 percent

Description of the Marlton Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 20 inches; clay
Bt2—20 to 28 inches; clay
Bt3—28 to 47 inches; clay

Substratum:
C—47 to 80 inches; stratified sandy loam and sandy clay loam

Properties and qualities

Drainage class: Moderately well drained
Parent material: Glauconitic clayey marine deposits or glauconitic clayey fluviomarine deposits, or both
Permeability: Slow to moderately rapid
Available water capacity: High
Reaction: Extremely acid to strongly acid
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The well drained Collington soils that contain less glauconite; intermingled with areas of the Marlton soil on knolls
- The somewhat poorly drained Kresson soils; on the lower parts of flats and in depressions

MumA—Mullica sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Mullica and similar soils: 90 percent
Minor components: 10 percent

Description of the Mullica Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
Ag—2 to 9 inches; sandy loam

Subsoil:
Bg1—9 to 14 inches; sandy loam
Bg2—14 to 28 inches; sandy loam

Substratum:
Cg1—28 to 31 inches; loamy sand
Cg2—31 to 40 inches; sand
Cg3—40 to 80 inches; gravelly loamy sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Loamy and sandy fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Seasonal high water table: Within a depth of 6 inches

Interpretive groups

Land capability classification: 4w
Hydrologic group: D

Minor Components

- Berryland soils that are sandy throughout and have a spodic horizon; intermingled with areas of the Mullica soil on the landform
- The poorly drained Fallsington soils; on the slightly higher flats

OTKA—Othello and Fallsington soils, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Depressions and flats

Composition

Othello and similar soils: 55 percent
Fallsington and similar soils: 45 percent

Description of the Othello Soil

Typical profile

Surface layer:
Oe—0 to 1 inch; mucky peat
A—1 to 13 inches; silt loam

Subsoil:
Btg1—13 to 32 inches; silt loam
Btg2—32 to 40 inches; silty clay loam

Substratum:
2C1—40 to 60 inches; loamy sand
2C2—60 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Silty eolian deposits over fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Very high
Reaction: Extremely acid to strongly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: C/D

Description of the Fallsington Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
A—2 to 5 inches; loam

Subsurface layer:
E—5 to 8 inches; sandy loam

Subsoil:
Btg1—8 to 14 inches; sandy loam
Btg2—14 to 31 inches; sandy clay loam

Substratum:
Cg1—31 to 62 inches; sand
Cg2—62 to 80 inches; gravelly sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to strongly acid
Seasonal high water table: Within a depth of 12 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: B/D

Minor Components

- There are no minor components that have significant differences from the major components in this map unit.

PEEAR—Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain

Landform: Flats and flood plains

Composition

Pedricktown and similar soils: 45 percent
Askecksy and similar soils: 35 percent
Mullica and similar soils: 20 percent

Description of the Pedricktown Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
Ag—2 to 9 inches; silt loam

Substratum:
Cg1—9 to 22 inches; sandy loam
Cg2—22 to 36 inches; loamy sand
Cg3—36 to 40 inches; sandy clay loam
Cg4—40 to 49 inches; sandy loam
Cg5—49 to 56 inches; loamy sand
Cg6—56 to 72 inches; sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Loamy and sandy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Ponding depth: 0 to 6 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Rare

Interpretive groups

Land capability classification: 4w
Hydrologic group: D

Description of the Askecksy Soil

Typical profile

Surface layer:
Ag—0 to 9 inches; loamy sand

Substratum:
Cg1—9 to 11 inches; sand
Cg2—11 to 28 inches; sand
Cg3—28 to 31 inches; sand
Cg4—31 to 80 inches; sand

Properties and qualities

Drainage class: Poorly drained
Parent material: Sandy fluviomarine deposits
Permeability: Rapid
Available water capacity: Low
Reaction: Extremely acid to strongly acid
Ponding depth: 0 to 6 inches above the surface
Seasonal high water table: Within a depth of 12 inches
Flooding: Rare

Interpretive groups

Land capability classification: 4w
Hydrologic group: A/D

Description of the Mullica Soil

Typical profile

Surface layer:
Oe—0 to 2 inches; mucky peat
Ag—2 to 9 inches; sandy loam

Subsoil:
Bg1—9 to 14 inches; sandy loam
Bg2—14 to 28 inches; sandy loam

Substratum:
Cg1—28 to 31 inches; loamy sand
Cg2—31 to 40 inches; sand
Cg3—40 to 80 inches; gravelly loamy sand

Properties and qualities

Drainage class: Very poorly drained
Parent material: Loamy and sandy fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Ponding depth: 0 to 6 inches above the surface
Seasonal high water table: Within a depth of 6 inches
Flooding: Rare

Interpretive groups

Land capability classification: 4w
Hydrologic group: D

Minor Components

- There are no minor components that have significant differences from the major components in this map unit.

PHG—Pits, sand and gravel

Setting

Slope: Not specified
Anthropogenic feature: Gravel pit

Composition

Pits, sand and gravel, and similar components: 100 percent

Description of Pits, Sand and Gravel

This map unit consists of open excavations, or Pits, from which soil material has been removed for use as construction material or road aggregate. The Pits commonly have steep, unstable slope faces. Some are filled with water. Most are mined for sand or gravel, or both. A few have been mined for materials high in glauconite. A description of the typical sequence, depth, and composition of the soil material is not provided because the material varies greatly from place to place, and the major properties and qualities are not given because the soil properties vary too much.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

SabB—Sassafras loamy sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Sassafras and similar soils: 85 percent
Minor components: 15 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2s
Hydrologic group: B

Minor Components

- Downer soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Aura soils that have a fragipan; on the higher parts of knolls
- The moderately well drained Woodstown soils; on the lower parts of flats and in small drainageways

SabC—Sassafras loamy sand, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain

Landform: Low hills and knolls

Composition

Sassafras and similar soils: 90 percent
Minor components: 10 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Aura soils that have a fragipan; on the higher parts of the landform

SabD—Sassafras loamy sand, 10 to 15 percent slopes

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Sassafras and similar soils: 85 percent
Minor components: 15 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- Westphalia soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Downer soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Aura soils that have a fragipan; on the higher parts of the landform

SabF—Sassafras loamy sand, 15 to 40 percent slopes

Setting

Slope: Steep and very steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Sassafras and similar soils: 90 percent
Minor components: 10 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
A—0 to 12 inches; loamy sand

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7e
Hydrologic group: B

Minor Components

- Westphalia soils that contain less clay; intermingled with areas of the Sassafras soil on the landform

SacA—Sassafras sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Sassafras and similar soils: 80 percent
Minor components: 20 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 1
Hydrologic group: B

Minor Components

- Downer soils that have a coarse-loamy particle-size control section; on similar landforms
- The moderately well drained Woodstown soils; on the slightly lower landforms
- Aura soils that have a fine-loamy particle-size control section and a fragipan; on similar landforms

SacB—Sassafras sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Sassafras and similar soils: 80 percent
Minor components: 20 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Downer soils that have a coarse-loamy particle-size control section; on similar landforms
- The moderately well drained Woodstown soils; on the slightly lower landforms
- Aura soils that have a fine-loamy particle-size control section and a fragipan; on similar landforms

SacC—Sassafras sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Sassafras and similar soils: 90 percent
Minor components: 10 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that have a coarse-loamy particle-size control section; on similar landforms
- The Aura soils that have a fine-loamy particle-size control section and a fragipan; on similar landforms

SacD—Sassafras sandy loam, 10 to 15 percent slopes

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Sassafras and similar soils: 85 percent
Minor components: 15 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- Westphalia soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Downer soils that contain less clay; intermingled with areas of the Sassafras soil on the landform
- Aura soils that have a fragipan; on the higher parts of the landform

SapB—Sassafras-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Sassafras and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam

Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy or gravelly fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Aura soils that have a fine-loamy particle-size control section and a fragipan; on similar landforms
- Downer soils that have a coarse-loamy particle-size control section; on similar landforms

ThfB—Tinton sand, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Tinton and similar soils: 90 percent
Minor components: 10 percent

Description of the Tinton Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sand

Subsurface layer:
E—12 to 26 inches; fine sand

Subsoil:
Bt—26 to 38 inches; fine sandy loam

Substratum:
C1—38 to 50 inches; sand
C2—50 to 80 inches; fine sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Sandy eolian deposits over glauconite-bearing fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: Moderate
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3s
Hydrologic group: A

Minor Components

- Freehold soils that do not have a thick sandy surface layer; intermingled with areas of the Tinton soil on the landform
- Collington soils that contain more clay and glauconite; intermingled with areas of the Tinton soil on the landform

UdauB—Udorthents-Urban land complex, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands
Anthropogenic feature: Cut (road, railroad, etc.) and fill
Landform: Low hills

Composition

Udorthents and similar soils: 60 percent
Urban land and similar components: 40 percent

Description of the Udorthents

Typical profile

Surface layer:
A—0 to 12 inches; loam

Substratum:
C—12 to 72 inches; loamy sand

Properties and qualities

Parent material: Coarse-loamy material transported by human activity
Permeability: Slow to moderately rapid
Available water capacity: Moderate
Reaction: Very strongly acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: D

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s

UddB—Udorthents, dredged materials, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands and Coastal Plain
Anthropogenic feature: Hydraulic fills and constructed levees
Landform: Depressions

Composition

Udorthents and similar soils: 95 percent
Minor components: 5 percent

Description of the Udorthents

Typical profile

Surface layer:
A—0 to 12 inches; loam

Substratum:
C—12 to 72 inches; sandy loam

Properties and qualities

Parent material: Coarse-loamy material transported by human activity
Permeability: Slow to moderately rapid
Available water capacity: Moderate
Reaction: Very strongly acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: B

Minor Components

- Water

UddcB—Udorthents, dredged coarse materials, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands and Coastal Plain
Anthropogenic feature: Hydraulic fills and constructed levees
Landform: Depressions

Composition

Udorthents and similar soils: 90 percent
Minor components: 10 percent

Description of the Udorthents

Typical profile

Surface layer:
A—0 to 12 inches; loam

Substratum:
C—12 to 72 inches; sand

Properties and qualities

Parent material: Sandy material transported by human activity
Permeability: Slow to moderately rapid
Available water capacity: Moderate
Reaction: Very strongly acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: A

Minor Components

- Urban land
- Water

UddfB—Udorthents, dredged fine materials, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands and Coastal Plain
Anthropogenic feature: Hydraulic fills and constructed levees
Landform: Depressions

Composition

Udorthents and similar soils: 90 percent
Minor components: 10 percent

Description of the Udorthents

Typical profile

Surface layer:
A—0 to 12 inches; loam

Substratum:
C—12 to 72 inches; clay

Properties and qualities

Parent material: Fine textured material transported by human activity
Permeability: Slow to moderate
Available water capacity: Very high
Reaction: Very strongly acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: D

Minor Components

- Urban land
- Water

UddrB—Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands and Coastal Plain
Anthropogenic feature: Hydraulic fills and artificial levees
Landform: Depressions

Composition

Udorthents and similar soils: 65 percent
Urban land and similar components: 35 percent

Description of the Udorthents

Typical profile

Surface layer:
A—0 to 12 inches; loam

Substratum:
C—12 to 72 inches; sandy loam

Properties and qualities

Parent material: Coarse-loamy material transported by human activity
Permeability: Slow to moderately rapid
Available water capacity: Moderate
Reaction: Very strongly acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

UdrB—Udorthents, refuse substratum, 0 to 8 percent slopes

Setting

Slope: Nearly level to strongly sloping
Landscape: Uplands
Anthropogenic feature: Fill
Landform: Low hills

Composition

Udorthents and similar soils: 100 percent

Description of the Udorthents

Typical profile

Substratum:
C—0 to 60 inches; silt loam

Properties and qualities

Drainage class: Well drained
Parent material: Silty material overlying refuse material transported by human activity
Permeability: Moderate
Available water capacity: High
Reaction: Moderately acid to neutral
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 7s
Hydrologic group: D

UR—Urban land

Setting

Slope: Nearly level
Landscape: Coastal plain and uplands
Anthropogenic feature: Urban land

Composition

Urban land and similar components: 95 percent
Minor components: 5 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- Udorthents that generally consist of loamy material in the upper part of the profile and sandy to loamy material mixed with household and industrial refuse in the lower part

USAURB—Urban land-Aura complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Urban land and similar components: 75 percent
Aura and similar soils: 15 percent
Minor components: 10 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Description of the Aura Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 13 inches; coarse sandy loam
Bt2—13 to 22 inches; coarse sandy loam
2Btx1—22 to 28 inches; gravelly coarse sandy loam
2Btx2—28 to 44 inches; gravelly sandy clay loam

2Btx3—44 to 59 inches; gravelly sandy clay loam

Substratum:
2C—59 to 80 inches; gravelly loamy coarse sand

Properties and qualities

Drainage class: Well drained
Parent material: Old loamy alluvium or old gravelly alluvium, or both
Permeability: Moderately slow to moderately rapid
Available water capacity: Moderate
Reaction: Extremely acid and very strongly acid
Depth to a fragipan: 15 to 40 inches
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Sassafras soils that contain more clay and do not have a fragipan; intermingled with areas of the Urban land and Aura soil on the landform
- Downer soils that do not have a fragipan; on the lower flats or lower parts of knolls

USDOWB—Urban land-Downer complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Urban land and similar components: 80 percent
Downer and similar soils: 15 percent
Minor components: 5 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Description of the Downer Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 16 inches; sandy loam
Bt2—16 to 36 inches; sandy loam

Substratum:
C1—36 to 48 inches; loamy sand
C2—48 to 80 inches; stratified sand and sandy loam

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits or gravelly fluviomarine deposits, or both
Permeability: Moderately rapid and rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- Sassafras soils that contain more clay; intermingled with areas of Urban land and Downer soil on the landform

USFREB—Urban land-Freehold complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Urban land and similar components: 75 percent
Freehold and similar soils: 20 percent
Minor components: 5 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Description of the Freehold Soil

Typical profile

Surface layer:
Ap—0 to 10 inches; sandy loam

Subsoil:
Bt1—10 to 14 inches; sandy loam
Bt2—14 to 21 inches; sandy clay loam
Bt3—21 to 35 inches; sandy loam

Substratum:
C—35 to 80 inches; loamy sand

Properties and qualities

Drainage class: Well drained
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Colts Neck soils that contain more ironstone fragments; intermingled with areas of the Urban land and Freehold soil on knolls

USSASB—Urban land-Sassafras complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Anthropogenic feature: Urban land
Landform: Low hills and knolls

Composition

Urban land and similar components: 75 percent
Sassafras and similar soils: 15 percent
Minor components: 10 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Description of the Sassafras Soil

Typical profile

Surface layer:
Ap—0 to 12 inches; sandy loam

Subsoil:
Bt1—12 to 18 inches; sandy loam
Bt2—18 to 28 inches; sandy clay loam
BC—28 to 40 inches; loamy sand

Substratum:
C1—40 to 58 inches; sand
C2—58 to 80 inches; sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderate to rapid
Available water capacity: High
Reaction: Extremely acid to slightly acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Downer soils that contain less clay; intermingled with areas of Urban land and Sassafras soil on the landform
- Aura soils that have a fragipan; on the higher parts of knolls

USWESB—Urban land-Westphalia complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Flats and knolls

Composition

Urban land and similar components: 80 percent
Westphalia and similar soils: 15 percent
Minor components: 5 percent

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- Freehold soils that contain more clay and glauconite; intermingled with areas of Urban land and Westphalia soil on the landform

WATER—Water

This map unit consists of areas inundated with water for most of the year. It generally includes water in rivers, ponds, or lakes.

WeeB—Westphalia fine sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Westphalia and similar soils: 80 percent
Minor components: 20 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate

Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; on the higher parts of knolls
- Freehold soils that contain more clay; on the lower parts of the landform
- The moderately well drained Buddtown soils; on small flats and the lower parts of knolls

WeeC—Westphalia fine sandy loam, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Westphalia and similar soils: 90 percent
Minor components: 10 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; intermingled with areas of the Westphalia soil

- Freehold soils that contain more clay; on the lower parts of the landform

WeeD—Westphalia fine sandy loam, 10 to 15 percent slopes

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Westphalia and similar soils: 90 percent
Minor components: 10 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
A—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; intermingled with areas of the Westphalia soil on the landform
- Freehold soils that contain more clay; on the lower parts of the landform

WeeD2—Westphalia fine sandy loam, 10 to 15 percent slopes, eroded

Setting

Slope: Moderately steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Westphalia and similar soils: 90 percent
Minor components: 10 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 4 inches; fine sandy loam

Subsoil:
Bt—4 to 13 inches; fine sandy loam
BC—13 to 28 inches; loamy fine sand

Substratum:
C1—28 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 4e
Hydrologic group: B

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; intermingled with areas of the Westphalia soil on the landform
- Freehold soils that contain more clay; on the lower parts of the landform

WeeF—Westphalia fine sandy loam, 15 to 40 percent slopes

Setting

Slope: Steep and very steep
Landscape: North Atlantic Coastal Plain
Landform: Low hills

Composition

Westphalia and similar soils: 85 percent
Minor components: 15 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
A—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam

BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 6e
Hydrologic group: B

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; intermingled with areas of the Westphalia soil on the landform
- Freehold soils that contain more clay; on the lower parts of the landform
- Collington soils that contain more clay and glauconite; near the base of hills

WehB—Westphalia-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Knolls

Composition

Westphalia and similar soils: 55 percent
Urban land and similar components: 30 percent
Minor components: 15 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Permeability: Moderate to rapid

Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 2e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; on the higher parts of knolls
- Freehold soils that contain more clay; on the lower parts of the landform
- The moderately well drained Buddtown soils; on small flats and on the lower parts of knolls

WehC—Westphalia-Urban land complex, 5 to 10 percent slopes

Setting

Slope: Strongly sloping
Landscape: North Atlantic Coastal Plain
Landform: Low hills and knolls

Composition

Westphalia and similar soils: 60 percent
Urban land and similar components: 30 percent
Minor components: 10 percent

Description of the Westphalia Soil

Typical profile

Surface layer:
Ap—0 to 6 inches; fine sandy loam

Subsoil:
Bt—6 to 15 inches; fine sandy loam
BC—15 to 30 inches; loamy fine sand

Substratum:
C1—30 to 48 inches; fine sand
C2—48 to 80 inches; stratified fine sand and loamy fine sand

Properties and qualities

Drainage class: Well drained
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both

Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to moderately acid
Depth to the seasonal high water table: More than 6 feet

Interpretive groups

Land capability classification: 3e
Hydrologic group: B

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The excessively drained Evesboro soils that are sandy throughout; intermingled with areas of the Westphalia soil and Urban land on the landform
- Freehold soils that contain more clay; on the lower parts of the landform

WoeA—Woodstown sandy loam, 0 to 2 percent slopes

Setting

Slope: Nearly level
Landscape: North Atlantic Coastal Plain
Landform: Drainageways and flats

Composition

Woodstown and similar soils: 80 percent
Minor components: 20 percent

Description of the Woodstown Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 26 inches; sandy loam
Bt2—26 to 30 inches; sandy clay loam
Bt3—30 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; loamy sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Old alluvium or sandy marine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral

Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Minor Components

- The well drained Downer soils that have a coarse-loamy particle-size control section; on the slightly higher landforms
- The poorly drained Fallsington soils; on the lower landforms
- The well drained Sassafras soils that have a fine-loamy particle-size control section; on the slightly higher landforms

WoeB—Woodstown sandy loam, 2 to 5 percent slopes

Setting

Slope: Gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Drainageways and flats

Composition

Woodstown and similar soils: 80 percent
Minor components: 20 percent

Description of the Woodstown Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 26 inches; sandy loam
Bt2—26 to 30 inches; sandy clay loam
Bt3—30 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; loamy sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Old alluvium or sandy marine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Minor Components

- The well drained Downer soils that have a coarse-loamy particle-size control section; on the slightly higher landforms
- The well drained Sassafras soils that have a fine-loamy particle-size control section; on the slightly higher landforms

- The somewhat poorly drained Glassboro soils that have a seasonal high water table at a depth of 12 to 18 inches and do not have a fragipan; on the lower landforms

WokA—Woodstown-Glassboro complex, 0 to 2 percent slopes

Setting

Slope: Nearly level (fig. 6)
Landscape: North Atlantic Coastal Plain
Landform: Drainageways and flats

Composition

Woodstown and similar soils: 70 percent
Glassboro and similar soils: 15 percent
Minor components: 15 percent

Description of the Woodstown Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Figure 6.—High-quality forage and row crops can be produced in areas of Woodstown-Glassboro complex, 0 to 2 percent slopes.

Subsoil:
Bt1—8 to 26 inches; sandy loam
Bt2—26 to 30 inches; sandy clay loam
Bt3—30 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; loamy sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Old alluvium or sandy marine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Description of the Glassboro Soil

Typical profile

Surface layer:
Ap—0 to 11 inches; sandy loam

Subsoil:
Bt1—11 to 16 inches; sandy loam
Bt2—16 to 21 inches; coarse sandy loam
Btg—21 to 26 inches; coarse sandy loam

Substratum:
Cg—26 to 40 inches; loamy coarse sand
C1—40 to 56 inches; coarse sand
C2—56 to 80 inches; gravelly coarse sand

Properties and qualities

Drainage class: Somewhat poorly drained
Parent material: Loamy fluviomarine deposits
Permeability: Moderately rapid and rapid
Available water capacity: Low
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 12 to 18 inches

Interpretive groups

Land capability classification: 3w
Hydrologic group: C

Minor Components

- The well drained Downer soils that contain less clay; on small knolls or on the higher parts of flats
- The poorly drained Fallsington soils; in small depressions or on the lower parts of drainageways

WooB—Woodstown-Urban land complex, 0 to 5 percent slopes

Setting

Slope: Nearly level and gently sloping
Landscape: North Atlantic Coastal Plain
Landform: Depressions and drainageways

Composition

Woodstown and similar soils: 65 percent
Urban land and similar components: 20 percent
Minor components: 15 percent

Description of the Woodstown Soil

Typical profile

Surface layer:
Ap—0 to 8 inches; sandy loam

Subsoil:
Bt1—8 to 26 inches; sandy loam
Bt2—26 to 30 inches; sandy clay loam
Bt3—30 to 36 inches; sandy loam

Substratum:
C—36 to 80 inches; loamy sand

Properties and qualities

Drainage class: Moderately well drained
Parent material: Old alluvium or sandy marine deposits, or both
Permeability: Moderate to rapid
Available water capacity: Moderate
Reaction: Extremely acid to neutral
Depth to the seasonal high water table: 18 to 42 inches

Interpretive groups

Land capability classification: 2w
Hydrologic group: C

Description of Urban Land

Urban land consists of areas where much of the soil surface is covered with asphalt, concrete, buildings, or other impervious cover. A description of the typical sequence, depth, and composition of the soil material is not provided because the soil material varies greatly from place to place.

Interpretive groups

Land capability classification: 8s
Hydrologic group: Not specified

Minor Components

- The well drained Downer soils that have a coarse-loamy particle-size control section; on the slightly higher landforms

- The well drained Sassafras soils that have a fine-loamy particle-size control section; on the slightly higher landforms
- The somewhat poorly drained Glassboro soils that have a seasonal high water table at a depth of 12 to 18 inches and do not have a fragipan; on the lower landforms

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where wetness or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact

on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland and other important farmland are described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading "Detailed Soil Map Units." Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Conditions are favorable for crops and pasture in Gloucester County. Because of soil suitability and a favorable climate, many types of field crops can be produced.

Corn and soybeans are row crops commonly grown in the county. Grain sorghum and similar crops can also be grown profitably if economic conditions are favorable. Wheat is a common close-growing crop, and rye, barley, and oats are suitable for planting. Grass seed can be produced from fescue and orchardgrass. Specialty crops include vegetables, small fruits, tree fruits, chrysanthemums, and many nursery plants. Some areas are used for melons, strawberries, snap beans, sweet corn, tomatoes, peppers, or other vegetables or small fruits. Apples and peaches are the most common tree fruits.

Soils that have good natural drainage and warm up early in spring are especially well suited to many vegetables and small fruits. They include the Downer, Freehold, and Sassafras soils in areas that have slopes of less than 8 percent. Crops generally can be planted and harvested earlier on these and similar soils than on other soils in Gloucester County. Most of the well drained, loamy soils are also suited to orchard crops and nursery plants. Soils in low areas, such as depressions, lower flats, and drainageways where frost is more frequent and air drainage is poor, generally are not so well suited to early vegetables, small fruits, and orchard crops.

The latest information about specialty crops can be obtained at the local office of the Cooperative Extension Service or the Natural Resources Conservation Service.

The nearly level and gently sloping soils in Gloucester County generally are well suited to most crops. Most of the crops are grown in areas of soils in the higher landscape positions because wetness typically is a limitation of the soils in the lower landscape positions. Higher lying, well drained soils, such as Sassafras, Freehold, Downer, and Collington soils, are suited to both row crops and vegetables. Most areas used for vegetable production, however, are also irrigated.

Crop production could be increased or maintained at high levels by applying the latest technology and high levels of management to all of the cropland in the survey area. The information in this soil survey can facilitate the application of such technology and management practices.

Cropland

The management considerations in areas of cropland in Gloucester County include controlling erosion, maintaining the water supply, improving soil fertility, applying a system of weed control, and improving tilth.

Erosion control.—Water erosion is a concern in areas used for crops in Gloucester County. It is a hazard on soils that have a slope of more than 2 percent. If erosion-control measures are not applied, significant loss of the surface layer may occur over time. As the slope increases, the hazard of erosion and the difficulty in controlling

erosion also increase. In Gloucester County, some areas of Aura, Sassafras, Freehold, Keyport, and Marlton soils have become significantly eroded.

Loss of the surface layer through erosion is damaging for two reasons. First, soil productivity is reduced as the surface layer thickness is reduced. Loss of the surface layer is especially damaging on soils that have a gravelly or clayey subsoil, such as the Aura and Marlton soils, and on soils having a layer in or below the subsoil that limits the depth of the root zone. Secondly, erosion on farmland results in the sedimentation of streams and estuaries. Controlling erosion minimizes the pollution of water by runoff carrying plant nutrients, soil particles, and plant residue. It maintains or improves the quality of water for municipal use, recreational activities, and fish and wildlife.

Erosion-control practices help to provide a protective surface cover, reduce the rate of runoff, and increase the rate of water infiltration. A cropping system that keeps a vegetative cover on the soil for extended periods helps to minimize soil loss and maintain the productive capacity of the soil. In more sloping areas, including forage crops of grasses and legumes in the cropping system helps to control erosion. The forage crops also add nitrogen to the soil and improve tilth.

Terraces and diversions shorten the length of slopes and thus minimize erosion caused by runoff. They are most effective on well drained soils and less effective on wetter soils that may become excessively wet in terrace channels. Contour farming and stripcropping help to control erosion on many of the soils in the survey area. Soils that have long, uniform slopes, such as those in the Aura, Sassafras, Freehold, Collington, and Westphalia series, are best suited to contour farming and stripcropping.

Minimizing tillage and leaving crop residue on the surface help to increase the rate of water infiltration, reduce the runoff rate, and control erosion. These practices can be effective on all cultivated soils in Gloucester County. In the more sloping areas that are used for corn or soybeans, no-till farming helps to control erosion. Soil tilth is an important factor in the germination of seeds and the infiltration of water into the soil. Soils that have good tilth are granular and porous. Incorporating crop residue, manure, and other organic material into the soils will improve tilth in most Gloucester County soils.

Water management.—Water management involves improving soil drainage and retaining soil moisture.

Excessive wetness is a management concern on cropland in Gloucester County. Wet soils limit equipment use and crop selection. They are slow to warm in the spring and are poorly aerated, and the crops grown on these soils are often susceptible to disease and pest management problems.

Seasonal wetness is generally not a major management problem with moderately well drained soils, such as those in the Hammonton, Keyport, and Woodstown series. Most crops are tolerant of these drainage conditions. Seasonal wetness is a significant management concern on somewhat poorly drained soils, such as those in the Deptford, Kresson, and Glassboro series. Cultivation and planting dates, as well as crop or variety selections, are often affected by excessive wetness in areas of these soils. Poorly drained and very poorly drained soils, such as those in the Atsion, Berryland, Mullica, Fallsington, and Manahawkin series, are so wet that they are not used for crops, except for special crops adapted to the wetness, or in areas that have had a drainage system installed. Blueberries, for example, are a locally important crop adapted to wetness and are commonly grown on Atsion soils.

A drainage system can improve soil productivity for cropland use in some soils, especially those that are somewhat poorly drained or moderately well drained. In these soils, improving drainage will increase crop yields and allow a greater variety of crops to be grown. Tile drains or open ditches can be used where suitable outlets are available. Diversions can be used to control runoff from adjacent areas.

Controlling excessive wetness in poorly drained and very poorly drained soils can be very difficult. Draining these areas is difficult because suitable outlets are rarely available. Many of these soils are also subject to flooding or ponding, and protecting crops in these areas from the damage caused by flooding or ponding is generally cost prohibitive. In addition, these soils generally meet the criteria for hydric soils, which is one of the parameters generally required for identification of wetlands. Alteration of drainage and wetness patterns in these soils is restricted by Federal and State regulations. Additional information about hydric soil criteria is given in the "Hydric Soils" section in this publication.

Managing drainage in conformance with Federal and State regulations concerning wetlands may require special permits, investigations, and planning. Contact the New Jersey Department of Environmental Protection for identification of hydric soils and potential wetlands prior to any alteration of soils in wet areas.

Retaining soil moisture is a major management concern in areas of the droughty Evesboro, Lakehurst, Lakewood, and Quakerbridge soils, which are sandy throughout. Pressurized irrigation systems are needed in areas of these soils; otherwise, crop production is very limited. Adding organic matter helps to increase the level of available soil moisture in these soils. Soils that have a surface layer of loamy sand and a loamy subsoil, such as those in the Aura, Sassafras, Downer, Collington, and Freehold series, can become droughty, especially during the summer months. Management practices used to help control erosion and improve soil tilth generally also help to retain soil moisture by reducing the rate of surface runoff and increasing the rate of water infiltration.

Soil fertility.—The soils in Gloucester County generally are low in natural fertility and are naturally acid. Additions of lime and fertilizer are needed for the production of most kinds of crops.

The liming requirement is a major management concern in areas of cropland. The acidity level in a soil affects the availability of many nutrients to plants and the activity of beneficial bacteria. Lime neutralizes exchangeable aluminum in the soil and thus counteracts the adverse effects of high levels of aluminum on many crops. Liming adds calcium (from calcitic lime) or calcium and magnesium (from dolomitic lime) to the soil. A soil test is a guide to what amount and kind of lime should be used. The desired pH levels may differ, depending on the soil properties and the crop to be grown.

Nitrogen fertilizer is required for most crops. It is generally not required for legumes such as soybeans, clover, and alfalfa. Soil tests can also indicate the need for phosphorus and potassium fertilizer. Phosphorus and potassium levels can build up in the soil if applications of these nutrients exceed crop demands.

Weed control.—Applying herbicides for weed control is a common practice on cropland in the county. It decreases the need for tillage and is an integral part of modern farming. Selected soil properties, such as organic matter content and texture of the surface layer, affect the rate of herbicide application. Estimates of both of these properties were determined for the soils in this county and are included in table 18, "Engineering Index Properties," and table 19, "Physical Properties of the Soils."

In some areas the organic matter content projected for a soil is outside the range shown in the table. It can be higher in soils that have received large amounts of animal or human waste. Soils that have recently been brought into cultivation may have a higher content of organic matter in the surface layer than similar soils that have been cultivated for a long time. A lower content of organic matter can occur if the surface layer has been partly or completely removed by erosion or if the soil has been subjected to land smoothing. Applying a conservation tillage system increases the content of organic matter in the surface layer. Current soil tests should be applied to determine the organic matter content in a specific area.

Tilth.—Tilth is an important factor in the germination of seeds and the infiltration of water into the soil. Soils that have good tilth are granular and porous. Tilth is reduced in eroded soils having a clayey or gravelly subsoil layer that becomes incorporated into the surface layer by tillage. The eroded Aura and Marlton soils are examples where the surface layer has been modified by the incorporation of subsoil material into the normal plow depth. Regular additions of crop residue, manure, and other organic material into the soils help to improve soil structure and tilth, increase the available moisture capacity, and reduce the potential for compaction.

Pasture and Hayland

Most of the pasture and hayland in Gloucester County supports a mixture of grasses and legumes. Hay is often grown in rotation with pasture. It is harvested into smaller square bales and sold for horse feed or rolled into large, round bales for use primarily as cattle feed (fig. 7). Some hay is chopped for use as hay silage for feed on some of the dairy farms. To maintain good-quality feed, the hayland and pasture in Gloucester County need to be renovated and measures that help to control brush and prevent overgrazing should be applied.

The soils in the survey area vary widely in their ability to produce grasses and legumes because of differences in such properties as drainage and available water capacity. The forage species selected for planting should be appropriate for the soil.

The nearly level and gently sloping, well drained soils are well suited to the highest producing crops, such as corn for grain and silage, alfalfa, or a mixture of alfalfa and orchardgrass or alfalfa and timothy. Sod-forming grasses, such as tall fescue and

Figure 7.—Harvested hay in an area of Hammonton loamy sand, 0 to 5 percent slopes. Large, round bales are often preferred to smaller "square" bales since round bales are generally less labor intensive to produce and are better suited to mechanized feeding systems.

orchardgrass, can also be grown. They have the additional benefit of minimizing erosion in the steeper areas. The moderately well drained and somewhat poorly drained soils are suited to clover-grass mixtures or to pure stands of clover or grasses. Legumes can be established through renovation in areas that support sod-forming grasses.

The intended use should be considered when forage species are selected. Selected species should provide maximum quality and versatility in the forage program. Legumes generally produce higher quality feed than grasses. They should be grown to the maximum extent possible. The taller legumes, such as alfalfa and red clover, are more versatile than legumes that are used primarily for grazing, such as white clover. Orchardgrass, timothy, and tall fescue are best suited to use as hay and silage.

Tall fescue can be used as a cool-season grass in Gloucester County. It is suited to a wide range of soil conditions and is grown for both pasture and hay. The growth that occurs from August through November commonly accumulates in the field and can be used for grazing in late fall and early winter. For maximum production, nitrogen fertilizer should be applied during the period when the grass is accumulating. The rate of application should be based on the desired level of production.

Warm-season grasses that are planted from early April through late May help to supplement cool-season grasses. They grow well during warm periods, especially from mid-June through September, when the growth of cool-season grasses is slow. Examples of warm-season grasses are bermudagrass and bermudagrass hybrids.

Renovation of pasture and hayland can increase forage yields in areas that have a good stand of grass. This process involves partially destroying the sod, usually by application of herbicides, applying lime and fertilizer, and seeding desirable forage species. Adding legumes to the stand of grass provides high-quality feed. Legumes increase summer production and transfer nitrogen from the air into the soil.

Orchards

Orchards produce a variety of fruit, mainly apples and peaches, in Gloucester County. Successful orchards require high levels of management and maintenance.

A uniform, sloping topography allows for good air drainage. The most desirable orchard sites are on hills and knolls having well drained soils, such as those in the Aura, Sassafras, and Downer series. In Gloucester County areas of Aura and Sassafras soils are commonly used for apple orchards. Trees planted in areas of soils that are wet, subject to flooding, or in drainageways or depressions produce low yields and are more susceptible to disease.

The layout of an orchard should include outlets for water flowing into the orchard from higher areas and for water flowing out of the orchard. Field borders and diversions that empty into grassed waterways dispose of water without causing erosion. Sod should be used between rows of trees and on all roads and erosion-control structures. It should be established as soon as possible after construction. Rows of trees should be planted on the contour and as nearly parallel to each other as possible. This arrangement helps to control erosion and allows easy access. Wet areas should be avoided as sites for access roads. If these areas are unavoidable, water bars and culverts should be installed.

The soils in Gloucester County have insufficient natural fertility to sustain orchards. They are naturally acid and are typically low in nitrogen and phosphorus. Where fertilizer has been applied, they are often high in potassium. Application rates for lime and fertilizer should be determined by tissue analysis of the trees and by soil analysis. Lime and fertilizer should be applied to access roads and erosion-control structures to maintain the sod.

The content of organic matter, the texture of the surface layer, and the depth to a water table affect the amount of herbicide used and the frequency of

application. Water from seeps and springs in a soil may reduce the effectiveness of herbicides.

Ornamental Crops

The ornamental crops grown in Gloucester County include Christmas trees and many species of native and nonnative trees, shrubs, and herbaceous plants used in landscaping. Also grown are many types of hybrid trees and shrubs.

Ornamental crops grow well on the well drained, loamy soils in Gloucester County. The low content of clay in the surface layer and subsurface layer makes ball and burlap harvesting difficult. In Gloucester County, loamy, well drained soils, such as those in the Downer, Sassafras, and Freehold series, are well suited to ornamental crops. Loamy, moderately well drained soils, such as those in the Woodstown and Hammonton series, are also used and suited to the species that can tolerate the seasonal high water table at a depth of about 1.5 to 2.0 feet.

Sandy soils, such as those in the Evesboro, Lakewood, and Quakerbridge series, that have a very low clay content are difficult to use for ornamental species that are ball and burlap harvested because these soils do not cling together and thus ball poorly. Soils that are wet, in drainageways or depressions, or have a high clay content also are difficult to use for ornamental species. They hold excess moisture around roots, which results in poor growth and encourages phytophthora root disease. Soils that have steep slopes should not be used because the slope limits the use of equipment for mowing, spraying, and harvesting. Steep slopes increase labor costs and the amount of time needed for harvesting and detrimentally affect plant shape. Sites should be selected in areas that have an adequate supply of clear water that can be used for spraying or irrigation, although most operations pump ground water from ground water aquifers. Disturbing as little of the planting area as possible helps to prevent excessive erosion. Areas between plants and areas between rows should remain in permanent sod to limit soil erosion.

Seedling line-out beds require soils that have a low content of clay in the surface layer. Soils with a thin surface layer and a high content of clay near the surface can hold seedling roots so tightly that tearing and breaking of roots result during harvest. Root damage reduces the vigor of the seedlings when they are transplanted to a field. Sandy soils, such as those in the Evesboro series, or loamy soils with a loamy sand surface layer are suited to line-out beds if the crop is irrigated.

Because of insufficient natural fertility, the soils in Gloucester County cannot quickly produce ornamentals. They are typically low in nitrogen and phosphorus and high in potassium. Most soils are naturally too acid for most ornamental crops, especially for hybrid ornamentals and some tree species. Application rates for lime and fertilizer should be determined by soil tests and by tissue analysis of the crop.

Herbicides are best used by banding or spot treatment. The content of organic matter, the texture of the surface layer, and the depth to a seasonal high water table affect the amount of herbicide used and the frequency of application. Excessively wet soils can reduce the effectiveness of herbicides.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 5 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for forestland or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA SCS 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, forestland, wildlife habitat, or recreation.

The acreage of soils in each capability class or subclass is shown in table 6. The capability classification of map units in this survey area is given in the section "Detailed Soil Map Units" and in the yields table.

Prime Farmland and Other Important Farmlands

Table 7 lists the map units in the survey area that are considered prime farmland, unique farmland, and farmland of statewide importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks (fig. 8). The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 78,144 acres, or nearly 36 percent of Gloucester County, meets the soil requirements for prime farmland if an adequate and dependable supply of irrigation water were available.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite

Figure 8.—An area of Downer sandy loam, 0 to 2 percent slopes, used to grow cabbage. This soil is considered prime farmland in Gloucester County. Irrigation is a common management practice used to increase vegetable quality and yield.

evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 8a and 8b show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste and application of sewage sludge) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (rapid infiltration of wastewater and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to a restrictive layer, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk

density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to a restrictive layer, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to a restrictive layer affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table,

ponding, available water capacity, permeability, depth to a restrictive layer, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Forestland Productivity and Management

Albert Coffey, forester, Natural Resources Conservation Service, helped to prepare this section.

Owners of woodland in Gloucester County have many objectives. These objectives include producing timber; conserving wildlife, soil, and water; preserving esthetic values; and providing opportunities for recreational activities. Public demand for clean water and recreational areas creates pressures and opportunities for owners of woodland.

Soils influence the distribution and growth of tree species in Gloucester County. For example, Atlantic white-cedar grows well in areas of organic, very poorly drained soils. Sweetgum, yellow-poplar, and red maple are adapted to grow in areas of mineral, poorly drained or very poorly drained soils, such as those in the Fallsington, Mullica, Jade Run, and Lenni series. White oak, scarlet oak, and black oak grow in areas of well drained soils that have moderate moisture content, such as those in the Freehold, Sassafras, Collington, and Downer series. Post oak, pitch pine, and chestnut oak grow in areas of soils with low moisture content, such as those in the sandy Evesboro, Lakewood, Lakehurst, and Quakerbridge series. Pitch pine is also adapted to poorly drained and very poorly drained sandy soils, such as those in the Atsion and Berryland series, which can also become droughty in the summer as the seasonal high water table is lowered. Soil serves as a reservoir for moisture, provides an anchor for roots, and supplies most of the available nutrients. These three qualities are directly or indirectly affected by organic matter content, reaction, fertility, drainage, texture, structure, depth, and landscape position.

The ability of a soil to serve as a reservoir for moisture, as measured by the available water capacity, is primarily influenced by texture, organic matter content, rooting depth, and content of rock fragments. Because of the fairly even and abundant summer rainfall in Gloucester County, the available water capacity is a limitation affecting tree growth mainly on sandy, excessively drained or somewhat excessively drained soils, such as those in the Evesboro, Lakewood, and Quakerbridge series.

The available supply of nutrients for tree growth is affected by several soil properties. Mineral horizons in the soil are important. Mineralization of humus releases nitrogen and other nutrients to plants. Calcium, magnesium, and potassium are held within the humus. Very small amounts of these nutrients are made available by the weathering of clay and silt particles. Most of the upland soils have been leached and contain only small amounts of nutrients below the surface layer. Soils that have a thin surface layer must be carefully managed during site preparation so that the surface layer is not removed or degraded.

The living plant community is part of the nutrient reservoir. The decomposition of leaves, stems, and other organic material recycles the nutrients that have accumulated in the forest ecosystem. Fire, excessive trampling by livestock, and erosion can result in the loss of these nutrients. Woodland management should include prevention of wildfires and protection from overgrazing.

In table 9, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average

height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Recreation

The soils of Gloucester County are rated in tables 10a and 10b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 10a and 10b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to a restrictive layer are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth

of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, and permeability. The soil properties that affect the growth of plants are depth to a restrictive layer, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, and permeability. The soil properties that affect the growth of plants are depth to a restrictive layer, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, and permeability. The soil properties that affect the growth of plants are depth to a restrictive layer, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction, depth to a water table, ponding, depth to a restrictive layer, the available water capacity in the upper 40 inches, the content of salts or calcium carbonate, and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

The soils of Gloucester County are capable of supporting diverse vegetative communities and wildlife habitat. The interspersing of cropland, idle fields, and borders of hardwood and pine forest provide diverse plant communities, or “edges,” utilized by many wildlife species. Other wildlife, including small, isolated reptile and amphibian populations, require more specialized wetland habitats. Hydric soils, such

as those in the Mullica, Manahawkin, Atsion, and Berryland series, can support the unique vegetation and habitat needed for these wildlife species.

The wildlife populations in Gloucester County can be maintained or increased through careful land-use planning, improvement of existing habitat, habitat preservation, and continued public education. Most of the wildlife habitat in the county is privately owned; therefore, much of the initiative to maintain or improve the wildlife populations in the county ultimately depends on the cooperation and awareness of individual landowners. Public sponsored programs can provide incentives to private individuals for wildlife conservation, ensuring that adequate wildlife populations exist for the enjoyment of future generations.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 11, the soils in the county are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and

wetness. Examples of these plants are oak, poplar, cherry, sweetgum, red maple, apple, dogwood, hickory, blackberry, and blueberry.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pitch pine, Atlantic white-cedar, red cedar, and juniper.

Shrubs are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are blueberry, winterberry, shadbush, sweet pepperbush, and mountain laurel.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, and slope. Examples of wetland plants are smartweed, wildrice, saltgrass, cordgrass, rushes, sedges, and reeds.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are wetness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants (fig. 9). Wildlife attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, and deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, osprey, muskrat, and beaver.

Hydric Soils

In this section, hydric soils are defined and described. The hydric soils in the survey area are listed in table 12. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council 1995; Hurt, Whited, and Pringle 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others 1979; National Research Council 1995; Tiner 1985; U.S. Army Corps of Engineers 1987). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Figure 9.—This area of Lakewood-Quakerbridge complex, 0 to 5 percent slopes, provides habitat for woodland wildlife.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 1995). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff 2003) and in the “Soil Survey Manual” (Soil Survey Division Staff 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (Hurt, Whited, and Pringle 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions

observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for a long or very long duration during the growing season.
4. Soils that are frequently flooded for a long or very long duration during the growing season.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data in the “Soil Properties” section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index,

soil reaction, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 13a and 13b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect

the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to a restrictive layer, hardness of the restrictive layer, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to a restrictive layer, hardness of the restrictive layer, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to a restrictive layer, hardness of the restrictive layer, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to a restrictive layer, hardness of the restrictive layer, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction, depth to a water table, ponding, depth to a restrictive layer, the available water capacity in the upper 40 inches, the content of salts or sodium, and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 14 and 15 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, and disposal field areas as they apply to New Jersey regulations. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning,

design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to a restrictive layer, and flooding affect absorption of the effluent. Stones, ice, and a restrictive layer interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas. These ratings are based on soil parameters that are not specific to any particular state but were developed to provide general suitability throughout the United States.

Some soils are underlain by loose sand and gravel at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to a restrictive layer, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if the water table is high enough to raise the level of sewage in the lagoon or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope and restrictive layers can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over the restrictive layer to make land smoothing practical.

Table 15 provides ratings for sewage disposal field areas based on New Jersey regulations regarding on-lot sewage disposal systems. *Disposal field* refers to areas where sewage effluent is discharged into the ground for additional treatment and disposal (New Jersey Department of Environmental Protection 1999). In this process, most of the suspended solids in the effluent are retained in the septic tank. The septic tank effluent, now much lower in suspended solids, is further treated in the soil, both by physical filtering and by biological treatment, mainly by bacteria. The treated

effluent is disposed of through downward movement through the soil or through lateral (horizontal) movement in soil layers above hydraulically restrictive layers. The soil is evaluated from the surface to a depth of 300 centimeters, or about 10 feet. Soil data maintained by USDA NRCS is for soil material to a depth of only 203 cm, or 80 inches, and soil properties are evaluated to this depth. Ratings provided in table 15 are based on the soil properties that affect the absorption of the effluent, construction, and pollution of ground water and surface water. Zone of saturation (an apparent or a perched water table), permeability, a restrictive layer and the substratum, and the percentage of coarse fragments affect the absorption and treatment of the effluent.

Because of public health concerns, depth to the zone of saturation is a major factor in determining soil suitability for disposal field areas. A limited depth to the zone of saturation limits the ability of the soil to remove pathogens, nutrients, and other waste components and increases the risk of ground-water contamination.

Massive bedrock and hydraulically restrictive or slowly permeable horizons or substrata can slow downward movement of sewage effluent. The effluent can build up, or "mound," causing prolonged saturated conditions. Lateral seepage of untreated or minimally treated effluent may result, creating a greater risk of surface water contamination.

Very rapid permeability associated with fractured bedrock or excessively coarse horizons or substrata may not provide adequate filtering capability for effective treatment of effluent, resulting in ground-water contamination.

Following are brief descriptions of the primary disposal system types permitted in New Jersey.

Conventional installation type (C).—The disposal bed or individual disposal trench is installed in an excavated area of natural soil.

Soil replacement type.—The disposal bed or individual disposal trench is installed on top of or in suitable fill material that was added to an excavated area that is below the original soil surface. In a bottom-lined soil replacement installation, or *SRB*, the fill material underlies the disposal field only. In a fill-enclosed soil replacement installation, or *SRE*, it underlies the disposal field and is added along the sides of the disposal bed.

Mound installation type (M).—The disposal field is installed in suitable fill material that has been mounded above the original soil surface.

Interceptor drain (C drain).—Although not an actual type of disposal system, interceptor drains are installed in sloping areas to intercept laterally moving ground water that is perched above a hydraulically restrictive horizon. The drains are installed in areas higher on the landscape and along the sides of disposal systems in order to reduce the amount of perched water entering the disposal system and thereby increase the functionality of the system.

Since these different types of disposal systems are used for various soil and site conditions, refer to NJAC 7:9A, "Standards for Individual Subsurface Sewage Disposal Systems," for more detailed and specific explanations, definitions, and requirements for each of these systems and further explanation of the New Jersey suitability classes described in the following paragraphs (New Jersey Department of Environmental Protection 1999).

The Roman numerals I, II, and III in the codes are indicative of the severity of the limitation (I is least limiting, and III is most limiting). In general the severity of a limitation increases as the depth to the limiting condition decreases.

Water table refers to a saturated zone in the soil. The code *Wr* refers to a regional water table, and the code *Wp* refers to a perched water table.

The term "horizon" refers to a layer of soil or rock material in a soil boring or pit that differs from the layers of soil above and below it in one or more soil

morphological characteristics, including color, texture, content of rock fragments, structure, consistence, and redoximorphic features. The code *Hc* refers to an excessively coarse textured horizon, and the code *Hr* refers to a hydraulically restrictive horizon.

The term “substratum” refers to the part of the soil below the solum where soil formation processes are generally not significant. It is the deepest layer of soil or rock material observed in a soil boring or pit. The upper boundary of the layer is visible, but the lower boundary is undetermined. The layer is expected, however, to extend through the required depth of evaluation (10 feet). The code *Sc* refers to an excessively coarse textured layer, and the code *Sr* refers to a hydraulically restrictive layer.

Construction Materials

Tables 16a and 16b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 16a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair,* or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium and salts, reaction, available water capacity, erodibility, texture, content of rock fragments, and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to a restrictive layer, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 17 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, and maintenance. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to a restrictive layer and the content of large stones affect the ease of excavation.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from Gloucester County, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 18 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 19 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In table 19, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In table 19, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 19, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil

properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 19, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 19 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors

being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of coarse fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 20 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliquivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliquivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory

analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Soil Features

Table 21 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Table 22 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 22 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal

weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff 1999, 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 23 shows the classification of the soils in Gloucester County. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Ultisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udults (*Ud*, meaning humid, plus *ult*, from Ultisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludults (*Hapl*, meaning minimal horizonation, plus *udult*, the suborder of the Ultisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Hapludults.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, siliceous, semiactive, mesic Typic Hapludults.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is Sassafras.

Soil Series and Their Morphology

In this section, each soil series recognized in Gloucester County is described. Characteristics of the soil and the material in which it formed are identified for each

series. A pedon, a small three-dimensional area of soil that is typical of the series in the survey area or in the surrounding areas is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff 1993). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (Soil Survey Staff 1999) and in “Keys to Soil Taxonomy” (Soil Survey Staff 2003). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

For soils listed as minor components in the “Detailed Soil Map Units” section but not included in this section, the soil series pedon description and range in characteristics are available on the Internet at <http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdname.cgi>.

Askecksy Series

Drainage class: Poorly drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats and depressions
Parent material: Sandy fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Siliceous, mesic Typic Psammaquents

Typical Pedon

Askecksy loamy sand, in an area of Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded, in Salem County, New Jersey; near Cohansey, 400 feet north of the intersection of Cobbs Mill Road and Cool Run Road and 300 feet east of Cobbs Mill Road, in a wooded area; USGS Alloway topographic quadrangle; lat. 39 degrees 33 minutes 00 seconds N. and long. 75 degrees 18 minutes 37 seconds W.

Ag—0 to 9 inches; black (10YR 2/1) loamy sand; single grain; loose; nonsticky, nonplastic; few medium and coarse roots and common fine and very fine roots; extremely acid; clear wavy boundary.

Cg1—9 to 11 inches; dark gray (10YR 4/1) sand; single grain; loose; nonsticky, nonplastic; few fine distinct brownish yellow (10YR 6/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; 2 percent rounded quartzite pebbles; extremely acid; gradual wavy boundary.

Cg2—11 to 28 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; few fine distinct brownish yellow (10YR 6/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; 2 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

Cg3—28 to 31 inches; very dark grayish brown (10YR 3/2) sand; single grain; loose; nonsticky, nonplastic; common medium faint light olive gray (5Y 6/2) iron depletions with clear boundaries throughout; 2 percent rounded quartzite pebbles; extremely acid; clear smooth boundary.

Cg4—31 to 80 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; few fine distinct brownish yellow (10YR 6/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; 2 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches

Seasonal high water table: Within a depth of 12 inches
Depth to the 2C horizon (if it occurs): More than 50 inches
Content of rock fragments: 0 to 5 percent, by volume, in the A horizon and 0 to 20 percent in the C horizon; mostly rounded quartz gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—peat, mucky peat, or muck

Ag horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 6, and chroma of 1 or 2
Texture—loamy sand

Cg horizon:
Color—hue of 10YR to 5GY, value of 4 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 7
Texture of the fine-earth fraction—sand, fine sand, or coarse sand
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Atsion Series

Drainage class: Poorly drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats and drainageways
Parent material: Sandy fluviomarine deposits (fig. 10)
Slope range: 0 to 2 percent

Taxonomic class: Sandy, siliceous, mesic Aeric Alaquods

Typical Pedon

Atsion sand, in an area of Atsion sand, 0 to 2 percent slopes, rarely flooded, in Cumberland County, New Jersey; 0.3 mile west of the intersection of Sherman Avenue and Mays Landing Road to an electric transmission line, about 1,200 feet south along the transmission line, and 50 feet east of a pole, in a wooded area; USGS Five Points topographic quadrangle; lat. 39 degrees 24 minutes 47 seconds N. and long. 74 degrees 58 minutes 35 seconds W.

Oi—0 to 2 inches; dark reddish brown (5YR 3/2) peat; moderate medium granular structure; very friable; many fine roots; extremely acid; abrupt smooth boundary.
A—2 to 4 inches; black (10YR 2/1) sand; weak medium granular structure; very friable; nonsticky, nonplastic; common fine and medium roots; extremely acid; clear wavy boundary.
E—4 to 26 inches; gray (10YR 6/1) sand; single grain; loose; nonsticky, nonplastic; few medium roots; extremely acid; abrupt smooth boundary.
Bh—26 to 34 inches; dark reddish brown (5YR 2.5/2) sand; massive; very firm; nonsticky, nonplastic; weakly cemented; coated sand grains; very strongly acid; gradual irregular boundary.
Cg1—34 to 46 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual smooth boundary.
Cg2—46 to 51 inches; pinkish gray (7.5YR 6/2) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; gradual smooth boundary.
Cg3—51 to 80 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; very strongly acid.

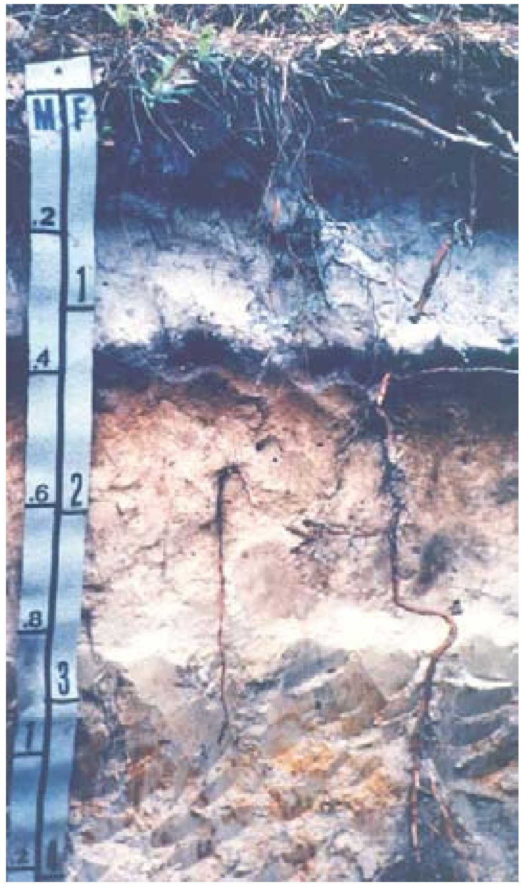

Figure 10.—A profile of an Atsion soil. A thin, dark Bh horizon is below a depth of about 1.2 feet. Atsion soils formed in sandy fluviomarine sediments. They have a seasonal high water table at or near the surface for long periods.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Depth to spodic horizon: 16 to 40 inches
Content of rock fragments: 0 to 10 percent, by volume, in the A, E, and B horizons and 0 to 20 percent in the C horizon
Reaction: Unless limed, extremely acid or very strongly acid throughout the profile

O horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 3
Type of organic soil material—peat

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2 or is neutral with value of 2 to 4
Texture—sand

E horizon:
Color—hue of 5YR to 5Y, value of 5 to 7, and chroma of 1 or 2
Texture—sand

Bh horizon:
Color—hue of 5YR or 7.5YR, value of 2 or 3, and chroma of 2 to 4
Texture—sand or loamy sand

Cg horizon:
Color—hue of 7.5YR to 5Y, value of 3 to 6, and chroma of 1 or 2 or is neutral with value of 3 to 6
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features (if they occur)—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Aura Series

Drainage class: Well drained
Permeability: Moderately slow to rapid
Landscape: Coastal plain upland
Landform: Knolls and low hills
Parent material: Loamy or gravelly old alluvium, or both (fig. 11)
Slope range: 0 to 10 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, mesic Typic Fragiudults

Typical Pedon

Aura sandy loam, in an area of Aura sandy loam, 2 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; 1,596 feet southeast of the intersection of Hancock Avenue and Harding Avenue; USGS Buena topographic quadrangle; lat. 39 degrees 38 minutes 54 seconds W. and long. 74 degrees 59 minutes 51 seconds W.

Ap—0 to 8 inches; dark yellowish brown (10YR 3/4) sandy loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; friable; many fine and medium roots; extremely acid; abrupt smooth boundary.

Bt1—8 to 13 inches; strong brown (7.5YR 5/6) coarse sandy loam; few fine faint strong brown (7.5YR 4/6) and few medium distinct very pale brown (10YR 7/4) mottles throughout; weak medium subangular blocky structure; friable; many fine roots; common distinct clay bridges between sand grains; 5 percent rounded quartzite pebbles; extremely acid; gradual wavy boundary.

Bt2—13 to 22 inches; strong brown (7.5YR 5/6) coarse sandy loam; few medium distinct light yellowish brown (10YR 6/4) mottles throughout; weak medium subangular blocky structure; friable; many fine roots; common distinct clay bridges between sand grains; 10 percent rounded quartzite pebbles; extremely acid; clear smooth boundary.

2Btx1—22 to 28 inches; yellowish red (5YR 4/6) gravelly coarse sandy loam; few fine distinct strong brown (7.5YR 5/6) mottles throughout; weak coarse subangular blocky structure; firm; brittle, very dense and compact (when removed, moist aggregates shatter easily into clay coated grains); common fine roots concentrated along vertical cracks; many distinct clay bridges between sand grains; few distinct clay films on surfaces of pores; 20 percent rounded quartzite pebbles; very strongly acid; clear wavy boundary.

2Btx2—28 to 44 inches; yellowish red (5YR 4/6) grading to red (2.5YR 4/6) gravelly sandy clay loam; common medium distinct red (2.5YR 4/8) mottles in the upper 8 inches; weak coarse subangular blocky structure; firm; brittle, very dense and compact (when removed, aggregates crush easily to clay coated grains); common fine roots along vertical cracks spaced several feet apart; many

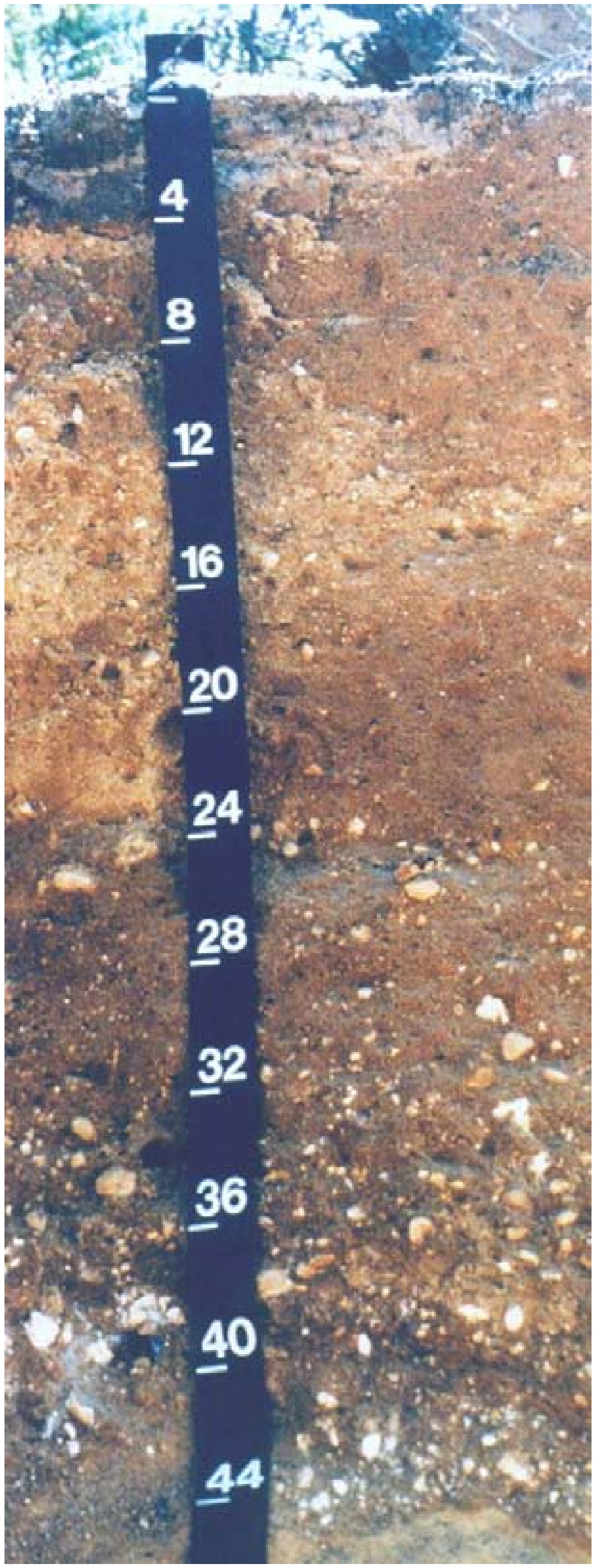

Figure 11.—A profile of an Aura soil. A very gravelly lithologic discontinuity occurs between depths of 24 and 44 inches. Aura soils formed in ancient loamy and gravelly alluvium.

continuous clay bridges between sand grains; few distinct clay films on surfaces of pores; 20 percent quartzite rounded gravel; very strongly acid; gradual wavy boundary.

2Btx3—44 to 59 inches; red (2.5YR 4/6) gravelly sandy clay loam; weak coarse subangular blocky structure; firm; brittle, dense and compact (when removed, aggregates crush easily to clay coated grains); common continuous clay bridges between sand grains; few distinct clay films on surfaces of pores; 20 percent rounded quartzite pebbles; very strongly acid; gradual wavy boundary.

2C—59 to 80 inches; yellowish red (5YR 4/8) gravelly loamy coarse sand; massive; very firm in place, friable when removed; 20 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the fragipan: 15 to 40 inches
Depth to lithologic discontinuity: 15 to 40 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 20 percent, by volume, in the A and Bt horizons; 10 to 50 percent in the Btx horizon; and 0 to 50 percent in the C horizon; mostly rounded quartzite gravel and none to few rounded igneous and metamorphic pebbles and cobbles
Reaction: Unless limed, extremely acid or very strongly acid
Other features: This pedon is located in an undisturbed wooded area and has a microsequence of A, E, and Bh horizons (micropodzol). In undisturbed wooded areas, the total thickness of the A, E, and Bh microsequence is less than 6 inches and that of the individual horizons is less than 2 inches thick. In other areas of Gloucester County, Aura soils typically have a thicker A or Ap horizon and do not have the thin A, E, and Bh microsequence.

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 1 to 4
Texture of the fine-earth fraction—sandy loam, loamy sand, loam, or coarse sandy loam

BE or E horizon (if it occurs):
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 to 6
Texture of the fine-earth fraction—sandy loam, loamy sand, or coarse sandy loam

Bh horizon (if it occurs):
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 6
Texture of the fine-earth fraction—sandy loam or coarse sandy loam

BA horizon (if it occurs):
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 8
Texture of the fine-earth fraction—sandy loam or coarse sandy loam
Mottles—discontinuous bands, patches, or variegations in shades of brown or red

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—sandy loam or coarse sandy loam
Mottles—none to few discontinuous bands, patches, or variegations in shades of brown or red

2Btx horizon:
Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—sandy loam, coarse sandy loam, or sandy clay loam
Mottles—few to common discontinuous bands, patches, or variegations in shades of brown or red

2C horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—loamy coarse sand, coarse sand, or coarse sandy loam
Mottles (if they occur)—few or common discontinuous bands, patches, or variegations in shades of brown or red

Berryland Series

Drainage class: Very poorly drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats, drainageways, and depressions
Parent material: Sandy fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Sandy, siliceous, mesic Typic Alaquods

Typical Pedon

Berryland sand, in an area of Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded, in Cape May County, New Jersey; 0.6 mile east of Cedar Swamp Creek on Tuckahoe Road, 0.3 mile southeast on Butter Road to a power line, and 1,200 feet south along the power line, in a wooded area; USGS Marmora topographic quadrangle; lat. 39 degrees 15 minutes 10 seconds N. and long. 74 degrees 41 minutes 31 seconds W.

Ag—0 to 11 inches; black (10YR 3/1) sand; weak fine granular structure; very friable; nonsticky, nonplastic; many fine roots; 5 percent rounded quartzite pebbles; extremely acid; clear wavy boundary.
Bh—11 to 19 inches; dark reddish brown (5YR 3/2) sand; massive; firm, brittle; dense and compact; nonsticky, nonplastic; few fine roots; organic coatings on sand grains; extremely acid; clear irregular boundary.
Bg—19 to 32 inches; gray (5Y 6/1) sand; single grain; loose; nonsticky, nonplastic; common medium faint pale yellow (5Y 8/3) irregularly shaped masses that have accumulations of iron and manganese oxide with diffuse boundaries throughout; few fine roots; 5 percent rounded quartzite pebbles; very strongly acid; clear wavy boundary.
B'h—32 to 40 inches; dark reddish brown (5YR 2/2) sand; massive; firm; brittle; slightly dense and compact; nonsticky, nonplastic; few fine and medium roots; 12 percent rounded quartzite pebbles; extremely acid; abrupt wavy boundary.
Cg1—40 to 44 inches; gray (10YR 6/1) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; abrupt wavy boundary.
Cg2—44 to 80 inches; gray (10YR 6/1) stratified sand and sandy loam; single grain; loose; nonsticky, nonplastic; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 72 inches
Seasonal high water table: Within a depth of 6 inches

Depth to spodic horizon: 10 to 16 inches
Content of rock fragments: 0 to 14 percent, by volume, throughout the profile; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—mucky peat, muck, or peat

Ag horizon:
Color—hue of 5YR to 2.5Y, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 or 3
Texture—sand

Eg horizon (if it occurs):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2 or is neutral with value of 5 or 6
Texture—sand or loamy sand

Bh or B'h horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 2 to 4
Texture—sand or loamy sand
Additional feature of Bh horizon—firm nodules may occur that range from noncemented to strongly cemented and are hard or very hard when dry

Bg horizon:
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 3 or is neutral with value of 4 to 6
Texture—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Cg horizon:
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 3
Texture—sand or stratified sand and sandy loam

Buddtown Series

Drainage class: Moderately well drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Knolls, flats, and depressions
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Slope range: 0 to 5 percent

Taxonomic class: Coarse-loamy, mixed, active, mesic Aquic Hapludults

Typical Pedon

Buddtown fine sandy loam, in an area of Buddtown-Deptford complex, 0 to 2 percent slopes, in Burlington County, New Jersey; about 1.5 miles southeast from the intersection of U.S. Highway 206 and Retreat Road on Retreat Road and 25 feet south of the road, in an idle field; USGS Pemberton topographic quadrangle; lat. 39 degrees 55 minutes 29 seconds N. and long. 74 degrees 44 minutes 06 seconds W.

Ap—0 to 9 inches; brown (10YR 4/3) fine sandy loam, brown (10YR 5/3) dry; moderate medium granular structure; very friable; slightly sticky, slightly plastic; many fine and very fine roots; few fine flakes of mica; 1 percent rounded quartzite pebbles; slightly acid; abrupt smooth boundary.

Bt1—9 to 12 inches; light yellowish brown (2.5Y 6/4) very fine sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; common fine and few very fine roots; few faint clay bridges between sand grains; common medium distinct yellowish brown (10YR 5/6) masses with accumulated iron and manganese oxide throughout; few fine distinct light yellowish brown (10YR 6/4) iron depletions throughout; 2 percent greenish black glauconite pellets; few fine flakes of mica; 1 percent rounded quartzite pebbles; slightly acid; gradual smooth boundary.

Bt2—12 to 26 inches; yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few very fine roots; few faint clay bridges between sand grains; common medium distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide throughout; few fine distinct pale brown (10YR 6/3) iron depletions throughout; 2 percent greenish black glauconite pellets; few fine flakes of mica; 1 percent rounded quartzite pebbles; strongly acid; gradual smooth boundary.

Bt3—26 to 34 inches; yellowish brown (10YR 5/8) loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay bridges between sand grains; common medium distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide throughout; few medium prominent light brownish gray (2.5Y 6/2) iron depletions throughout; 2 percent greenish black glauconite pellets; few fine flakes of mica; 1 percent rounded quartzite pebbles; strongly acid; gradual smooth boundary.

2C1—34 to 41 inches; light yellowish brown (2.5Y 6/4) loamy coarse sand; massive; very friable; nonsticky, nonplastic; common coarse prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide throughout; common medium distinct light brownish gray (2.5Y 6/2) iron depletions throughout; 2 percent greenish black glauconite pellets; few fine flakes of mica; 5 percent quartzite gravel; very strongly acid; clear smooth boundary.

2C2—41 to 54 inches; light yellowish brown (2.5Y 6/3) loamy sand; massive; very friable; nonsticky, nonplastic; common medium prominent olive yellow (2.5Y 6/8) masses with accumulated iron and manganese oxide throughout; common medium distinct light gray (2.5Y 7/1) iron depletions throughout; common fine flakes of mica; 5 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

2C3—54 to 65 inches; pale olive (5Y 6/4) coarse sand; single grain; loose; nonsticky, nonplastic; few coarse prominent yellowish brown (10YR 5/6) masses with accumulated iron and manganese oxide throughout; common medium distinct light olive gray (5Y 6/2) iron depletions throughout; few fine flakes of mica; 5 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.

2C4—65 to 80 inches; pale olive (5Y 6/4) coarse sand; single grain; loose; nonsticky, nonplastic; many coarse prominent yellowish brown (10YR 5/6) masses with accumulated iron and manganese oxide throughout; common medium distinct light olive gray (5Y 6/2) iron depletions throughout; few fine flakes of mica; 10 percent rounded quartzite pebbles; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches

Depth to the seasonal high water table: 18 to 42 inches

Depth to lithologic discontinuity: 25 to more than 60 inches to horizons containing less silt and very fine sand, of differing marine origin

Content of silt and very fine sand in the fine-earth fraction: 45 to 85 percent above the lithologic discontinuity

Content of rock fragments: 0 to 5 percent, by volume, in the A and B horizons and 0 to 14 percent in the C horizon; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout
Content of glauconite: 0 to 2 percent, by volume, glauconite pellets throughout the soil
Content of mica: 0 to 20 percent, by volume, throughout the soil

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color (moist)—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 1 to 4
Texture—fine sandy loam

Bt horizon:
Color—hue of 7.5YR or 2.5Y, value of 4 to 6, and chroma of 3 to 8
Texture—fine sandy loam, very fine sandy loam, or loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive, gray, or white

Cg horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture—loamy fine sand, loamy very fine sand, sandy loam, fine sandy loam, very fine sandy loam, or loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive, gray, or white

2C horizon:
Color—hue of 10YR to 5Y, value of 5 to 8, and chroma of 3 to 6
Texture—loamy sand, sand, coarse sand, or loamy coarse sand
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of gray

Chicone Series

Drainage class: Very poorly drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flood plains
Parent material: Silty alluvium over organic woody material
Slope range: 0 to 1 percent

Taxonomic class: Coarse-silty, mixed, active, acid, mesic Thapto-Histic Fluvaquents

Typical Pedon

Chicone silt loam, in an area of Chicone silt loam, 0 to 1 percent slopes, frequently flooded, in Salem County, New Jersey; near Cohansey, 400 feet north of the intersection of Cobbs Mill Road and Cool Run Road and 300 feet east of Cobbs Mill Road, in a wooded area; USGS Alloway topographic quadrangle; lat. 39 degrees 33 minutes 00 seconds N. and long. 75 degrees 18 minutes 37 seconds W.

A—0 to 5 inches; brown (7.5YR 4/3) silt loam; moderate fine granular structure; friable; slightly sticky, slightly plastic; few fine distinct yellowish red (5YR 4/6) irregularly shaped masses with accumulated iron and manganese oxide and few fine prominent brown (7.5YR 4/2) irregularly shaped iron depletions with clear boundaries throughout; many medium and fine roots; moderately acid; abrupt smooth boundary.

Cg1—5 to 20 inches; dark brown (7.5YR 3/2) silt loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine roots; few fine distinct brown (7.5YR 4/4) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; moderately acid; abrupt smooth boundary.

Cg2—20 to 28 inches; dark brown (7.5YR 3/2) silt loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few fine roots; moderately acid; abrupt smooth boundary.

Oe—28 to 65 inches; black (10YR 2/1) mucky peat; 20 percent fiber content of the soil volume, after rubbing; massive; 15 percent, by weight, mineral soil material; moderately acid; gradual smooth boundary.

C'g—65 to 80 inches; gray (10YR 6/1) sand; single grain; loose; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 to 1 percent, by volume, in the O horizon; 0 to 2 percent in the A and Cg horizons; and 0 to 20 percent in the C'g horizon; mostly rounded quartzite gravel
Depth to buried organic soil material: 16 to 40 inches
Reaction: Extremely acid to strongly acid

O horizon:
Type of organic soil material—mucky peat or muck

A or Ap horizon:
Color—hue of 10YR or 7.5YR, value of 2 to 4, and chroma of 1 to 4
Texture—silt loam
Redoximorphic features—iron depletions in shades of brown or gray and masses with accumulated iron and manganese oxide in shades of yellow or brown

Cg horizon:
Color—hue of 10YR or 7.5YR, value of 2 to 5, and chroma of 1 or 2 or is neutral with value of 2 to 5
Texture—silt loam or loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of yellow or brown

Oe or O'e horizon:
Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or is neutral with value of 2 to 4
Type of organic material—mucky peat

C'g horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture of the fine-earth fraction—sand or loamy sand

Colemantown Series

Drainage class: Poorly drained
Permeability: Slow to moderate
Landscape: Coastal plain
Landform: Depressions, flats, and drainageways
Parent material: Glauconite-bearing fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Fine, glauconitic, mesic Typic Albaquults

Typical Pedon

Colemantown loam, in an area of Colemantown loam, 0 to 2 percent slopes, occasionally flooded, in Burlington County, New Jersey; 2.5 miles northwest of Medford on the property of the English Setter Club; about 1,200 feet west of County Route 541 along a lane, 400 feet south of the lane, in an idle field; USGS Mount Holly topographic quadrangle; lat. 39 degrees 55 minutes 49 seconds N. and long. 74 degrees 49 minutes 45 seconds W.

Ap—0 to 10 inches; olive gray (5Y 4/2) loam; moderate medium granular structure; friable; slightly sticky, slightly plastic; many fine and medium roots; few fine prominent strong brown (7.5YR) masses with accumulated iron and manganese oxide in the lower part; 10 percent greenish glauconite pellets; very strongly acid; abrupt smooth boundary.

Btg1—10 to 24 inches; dark greenish gray (5GY 4/1) clay; moderate coarse prismatic structure parting to moderate medium angular blocky; firm; very sticky, very plastic; few fine roots; many medium prominent strong brown (7.5YR 5/8) and yellowish brown (10YR 5/8) masses with accumulated iron and manganese oxide; common distinct clay films on faces of peds; 45 percent greenish glauconite pellets; very strongly acid; gradual smooth boundary.

Btg2—24 to 34 inches; dark greenish gray (5GY 4/1) sandy clay; moderate coarse prismatic structure parting to moderate medium angular blocky; firm; very sticky, very plastic; many fine and medium prominent strong brown (7.5YR 5/8) and yellowish brown (10YR 5/8) masses with accumulated iron and manganese oxide; few weakly cemented brownish masses with accumulated iron and manganese oxide; common distinct clay films on faces of peds; 45 percent greenish glauconite pellets; very strongly acid; gradual smooth boundary.

BCg—34 to 50 inches; dark greenish gray (10Y 4/1) clay loam with pockets of sandy clay loam; moderate medium subangular blocky structure; firm; sticky, plastic; few medium prominent light olive brown (2.5Y 5/6) masses with accumulated iron and manganese oxide; few weakly cemented brownish masses with accumulated iron and manganese oxide; 45 percent greenish glauconite pellets; very strongly acid; gradual smooth boundary.

Cg—50 to 80 inches; dark greenish gray (10Y 3/1) and dark olive gray (5Y 3/2) sandy loam and sandy clay loam; massive; friable; slightly sticky, slightly plastic; 50 percent glauconite pellets; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Content of rock fragments: 0 to 10 percent, by volume, throughout; mostly rounded quartzite
Reaction: Unless limed, extremely acid to strongly acid throughout the profile
Content of glauconite: 0 to 20 percent, by volume, glauconite pellets in the fine-earth fraction of the A and E horizons and 20 percent or more in the B and C horizons

O horizon (if it occurs):
Type of organic soil material—mucky peat or muck

A, Ap, or Ag horizon:
Color (moist)—hue of 10YR to 5Y, value of 2 to 4, and chroma of 1 to 4 or hue of 10Y or 5GY, value of 2.5 to 4, and chroma of 1 or 2
Texture—fine sandy loam, sandy loam, or loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown

Eg horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2 or hue of 10Y or 5GY, value of 5 to 7, and chroma of 1 or 2
Texture—loamy fine sand, fine sandy loam, sandy loam, or loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less in the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

E horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 3

Btg horizon:
Color—10Y to 5G, value of 2.5 to 4, and chroma of 1 or 2
Texture—sandy clay loam, sandy clay, or clay; thin subhorizons of clay loam in some pedons
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less in the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

Bt horizon (if it occurs):
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6

BCg horizon:
Color—hue of 10Y to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture—sandy clay, sandy clay loam, clay loam, loam, or sandy loam; may include pockets of these textures
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less in the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

BC horizon (if it occurs):
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6

Cg horizon:
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 1 or 2 or hue of 10Y to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture—sandy loam, sandy clay loam, sandy clay, or clay; may include pockets of these textures or sandier textures; thin, iron-cemented strata or nodules in some pedons

Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less in the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

C horizon (if it occurs):
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6

Collington Series

Drainage class: Well drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats, hills, and knolls
Parent material: Glauconite-bearing loamy fluviomarine deposits
Slope range: 0 to 10 percent

Taxonomic class: Fine-loamy, mixed, active, mesic Typic Hapludults

Typical Pedon

Collington sandy loam, in an area of Collington sandy loam, 0 to 2 percent slopes, in an idle field in Gloucester County, New Jersey; on State Highway 47, about 0.56 mile northwest of the intersection of State Highway 47 and State Highway 41, near the town of Fairview, and 400 feet southwest of State Highway 47; USGS Runnemeade topographic quadrangle; lat. 39 degrees 47 minutes 12 seconds N. and long. 75 degrees 06 minutes 25 seconds W.

Ap—0 to 9 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; slightly sticky, nonplastic; 2 percent olive and greenish glauconite pellets; strongly acid; abrupt smooth boundary.

Bt1—9 to 22 inches; yellowish brown (10YR 5/4) loam; weak fine subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; common wormholes filled with material from the overlying horizon; 5 percent olive and greenish glauconite pellets increasing to 10 percent in the lower part; strongly acid; gradual smooth boundary.

Bt2—22 to 30 inches; light olive brown (2.5Y 5/4) loam; moderate medium subangular blocky structure parting to moderate fine subangular blocky; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; 10 percent olive and greenish glauconite pellets increasing to 15 percent in the lower part; strongly acid; gradual wavy boundary.

BC—30 to 38 inches; olive (5Y 5/6) sandy loam; few lenses of olive (5Y 4/4) sandy clay loam and common lenses of pale yellow (5Y 8/4) loamy very fine sand; weak fine subangular blocky structure; friable; slightly sticky, nonplastic; 15 percent olive and greenish glauconite pellets; very strongly acid; clear irregular boundary.

C1—38 to 43 inches; olive (5Y 4/4) sandy loam; common thin stratified lenses of pale yellow (5Y 7/4) loamy fine sand; few fine prominent yellowish brown (10YR 5/6) mottles; massive; very friable; slightly sticky, nonplastic; 15 percent olive and greenish glauconite pellets; very strongly acid; clear irregular boundary.

C2—43 to 80 inches; pale olive (5Y 6/4) and olive (5Y 4/4) sandy loam; few thin stratified lenses of pale olive (5Y 6/4) fine sandy loam and pale yellow (5Y 7/4) loamy fine sand; common fine prominent yellowish brown (10YR 5/6) mottles; massive; very friable; slightly sticky, nonplastic; 20 percent olive and greenish glauconite pellets; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 10 percent, by volume, in the A, B, and C horizons; mostly fine or medium rounded quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile
Content of glauconite: Weighted average of 0 to 10 percent, by volume, pellets in the A and E horizons; 10 to 20 percent in the B horizon; and 2 to 40 percent in the C horizon

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 2 to 4
Texture—sandy loam or loamy sand

Bt horizon:
Color—hue of 5YR to 5Y, value of 4 to 6, and chroma of 3 to 6
Texture—loam, sandy clay loam, or clay loam

BC horizon:
Color—hue of 5YR to 5Y, value of 4 to 6, and chroma of 3 to 6
Texture—sandy loam or fine sandy loam

C or Cg horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 7, and chroma of 3 to 8 or hue of 5GY to 5G, value of 3 to 5, and chroma of 1 or 2
Texture—stratified sandy loam and loamy fine sand or stratified sand and loamy sand

Colts Neck Series

Drainage class: Well drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Hills and knolls
Parent material: Glauconite-bearing loamy and channery marine deposits
Slope range: 2 to 10 percent
Taxadjunct statement: The Colts Neck soils in Gloucester County are taxadjuncts to the series because there is a slight difference in the color of the surface layer than is defined as the range for the series. This minor difference does not affect the use and management of the soils.

Taxonomic class: Fine-loamy, mixed, active, mesic Humic Hapludults

Typical Pedon

Colts Neck sandy loam, in an area of Colts Neck sandy loam, 2 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; on High Road, about 0.75 mile southeast of the intersection of Township Line Road and High Road, about 1,500 feet northeast of High Road; USGS Woodstown topographic quadrangle; lat. 75 degrees 21 minutes 50 seconds N. and long. 39 degrees 16 minutes 15 seconds W.

Ap—0 to 8 inches; brown (7.5YR 4/4) sandy loam; moderate medium granular structure; friable; many fine and medium roots; 2 percent glauconite pellets;

10 percent randomly oriented indurated ironstone channers; moderately acid; abrupt smooth boundary.

Bt1—8 to 25 inches; reddish brown (5YR 4/4) sandy loam; moderate medium subangular blocky structure; friable; common fine and medium and few coarse roots; common distinct clay bridges between sand grains; few faint clay films on faces of peds; 5 percent glauconite pellets; 10 percent randomly oriented indurated ironstone channers; strongly acid; gradual wavy boundary.

Bt2—25 to 41 inches; red (2.5YR 4/8) and reddish brown (5YR 4/4) sandy clay loam; weak medium subangular blocky structure; friable; 10 percent glauconite pellets; few fine and coarse roots; common distinct clay bridges between sand grains; common faint clay films on faces of peds; 3 percent indurated ironstone channers; moderately acid; gradual wavy boundary.

BC—41 to 46 inches; red (2.5YR 4/8) and reddish brown (5YR 4/4) channery sandy loam; moderate medium granular structure; friable; 5 percent glauconite pellets; few roots; 10 percent indurated ironstone channers; 5 percent moderately cemented ironstone parachanners; channers and parachanners in thin discontinuous horizontal interlayers; slightly acid; gradual smooth boundary.

C1—46 to 65 inches; red (2.5YR 4/8) and yellowish red (5YR 4/6) channery loamy sand; massive; friable; very friable when removed; 3 percent glauconite pellets; 15 percent indurated ironstone channers; 10 percent moderately cemented ironstone parachanners; channers and parachanners in thin discontinuous horizontal interlayers; very strongly acid; clear smooth boundary.

C2—65 to 70 inches; strong brown (7.5YR 5/8) loamy coarse sand; massive; very friable; 3 percent glauconite pellets; 2 percent moderately cemented ironstone parachanners; channers and parachanners in thin discontinuous horizontal interlayers; very strongly acid; clear smooth boundary.

C3—70 to 74 inches; yellowish red (5YR 4/6) and strong brown (7.5YR 5/8) channery loamy sand; massive; friable; very friable when removed; 3 percent glauconite pellets; 15 percent indurated ironstone channers; 10 percent moderately cemented ironstone parachanners; channers and parachanners in thin discontinuous horizontal interlayers; very strongly acid; clear smooth boundary.

C4—74 to 80 inches; strong brown (7.5YR 5/8) loamy sand; massive; very friable; 2 percent glauconite pellets; 3 percent moderately cemented ironstone parachanners; channers and parachanners in thin discontinuous horizontal interlayers; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches

Depth to the seasonal high water table: More than 80 inches

Depth to petroferric contact (if it occurs): More than 72 inches

Depth to continuous cemented layers (if they occur): More than 72 inches

Content of rock fragments: 3 to 20 percent, by volume, in the A horizon and 0 to 35 percent, by volume, in the B and C horizons; mainly in the form of indurated to moderately cemented ironstone channers or parachanners; ironstone fragments the size of flagstones in some pedons; in the lower part of the B horizon and in the C horizon, fragments typically horizontally oriented and in thin alternating interlayers within noncemented to very weakly cemented fine-earth materials; highly fractured and discontinuous horizontal and vertical interlayers that are not root restrictive

Reaction: Unless limed, extremely acid to slightly acid throughout the profile

Content of glauconite: 0 to 10 percent glauconite pellets, by volume, in the A horizon, 2 to 10 percent glauconite pellets in the B horizon, and 0 to 20 percent glauconite pellets in the C horizon

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

Ap horizon:
Color—hue of 7.5YR to 10YR, value of 3 to 5, and chroma of 3 to 5
Texture of the fine-earth fraction—typically sandy loam but includes loamy sand in a few pedons

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 6
Texture of the fine-earth fraction—sandy loam or sandy clay loam
Cementation—dominantly noncemented but ranges to very weakly cemented or weakly cemented in thin, discontinuous subhorizons

BC horizon:
Color—hue of 2.5YR or 5YR, value of 3 to 5, and chroma of 4 to 6
Texture of the fine-earth fraction—sandy loam or loamy sand
Cementation—dominantly noncemented but ranges to very weakly or weakly cemented in thin, discontinuous subhorizons

C horizon:
Color—hue of 2.5YR to 7.5Y, value of 3 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—loamy sand or loamy coarse sand
Cementation—dominantly noncemented but ranges to very weakly cemented or weakly cemented in thin, discontinuous subhorizons

Deptford Series

Drainage class: Somewhat poorly drained
Permeability: Moderate and moderately rapid
Landscape: Coastal plain
Landform: Flats, depressions, and knolls
Parent material: Loamy eolian or loamy fluviomarine deposits, or both
Slope range: 0 to 2 percent

Taxonomic class: Coarse-loamy, mixed, active, mesic Aeric Endoaquults

Typical Pedon

Deptford very fine sandy loam, in an area of Buddtown-Deptford complex, 0 to 2 percent slopes, in Camden County, New Jersey; about 0.3 mile west from the intersection of County House Road and County Road 707, directly north of the Gloucester County line, in a pastured area; USGS Runnemede topographic quadrangle; lat. 39 degrees 01 minute 56 seconds N. and long. 75 degrees 56 minutes 56 seconds W.

Ap—0 to 8 inches; dark gray (10YR 4/1) very fine sandy loam; weak fine granular structure; very friable; slightly sticky, nonplastic; many fine and very fine roots; few fine and very fine flakes of mica; 2 percent fine greenish black glauconite pellets; 3 percent rounded quartzite pebbles; slightly acid; abrupt smooth boundary.

Bt1—8 to 12 inches; brownish yellow (10YR 6/6) very fine sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, nonplastic; common fine and very fine roots; few continuous faint clay bridges between sand grains; common medium distinct brownish yellow (10YR 6/8) masses with accumulated iron and manganese oxide and few medium distinct pale brown (10YR 6/3) iron

depletions; few fine and very fine flakes of mica; 2 percent greenish black glauconite pellets; 3 percent rounded quartzite pebbles; slightly acid; clear smooth boundary.

Bt2—12 to 22 inches; light yellowish brown (2.5Y 6/4) loam; weak medium subangular blocky structure; very friable; slightly sticky, nonplastic; few very fine roots; few continuous very faint clay bridges between sand grains; many medium prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide and common medium distinct gray (10YR 6/1) iron depletions; few fine and very fine flakes of mica; 2 percent greenish black glauconite pellets; 3 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.

Btg—22 to 46 inches; light gray (10YR 7/1) very fine sandy loam; moderate medium subangular blocky structure; very friable; slightly sticky, nonplastic; few continuous very faint clay bridges between sand grains; common coarse distinct light yellowish brown (10YR 6/4) and common medium prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; few fine and very fine flakes of mica; 2 percent greenish black glauconite pellets; very strongly acid; clear smooth boundary.

BCtg—46 to 50 inches; light gray (2.5Y 7/1) fine sandy loam; weak fine subangular blocky structure; very friable; slightly sticky, nonplastic; few discontinuous very faint clay bridges between sand grains; common medium distinct light yellowish brown (10YR 6/4) and common medium distinct yellowish brown (10YR 5/4) masses with accumulated iron and manganese oxide; few fine and very fine flakes of mica; 2 percent greenish black glauconite pellets by volume; very strongly acid; clear smooth boundary.

Cg1—50 to 62 inches; light gray (2.5Y 7/1) fine sandy loam; massive; very friable; slightly sticky, nonplastic; few medium distinct yellowish brown (10YR 5/4) masses with accumulated iron and manganese oxide; common fine and very fine flakes of mica; very strongly acid; clear smooth boundary.

Cg2—62 to 80 inches; light gray (2.5Y 7/1) stratified loamy very fine sand and very fine sandy loam; massive; very friable; nonsticky, nonplastic; common coarse distinct yellowish brown (10YR 5/4) masses with accumulated iron and manganese oxide; common fine and very fine flakes of mica; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches

Depth to the seasonal high water table: 12 to 18 inches

Content of rock fragments: 0 to 5 percent, by volume, in the A and B horizons and 0 to 25 percent in the C horizon, mostly rounded quartzite gravel

Reaction: Unless limed, extremely acid to strongly acid

Content of glauconite: 0 to 2 percent glauconite pellets, by volume, throughout the soil

Content of silt and very fine sand: Typically, 45 to 85 percent in the A and B horizons

Content of mica: 0 to 20 percent, by volume, throughout the soil

O horizon (if it occurs):

Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 4

Texture—very fine sandy loam

Bt horizon:

Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 3 to 8

Texture—very fine sandy loam, loam, silt loam, or fine sandy loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive, gray, or white

Btg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 7
Texture—very fine sandy loam and sandy loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

BCtg or BCg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 7
Texture—fine sandy loam, sandy loam, loamy fine sand, or stratified loamy very fine sand and very fine sandy loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

Cg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 5 to 7
Texture of the fine-earth fraction—fine sandy loam, sandy loam, loamy fine sand, or stratified loamy very fine sand and very fine sandy loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

2C horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 5 to 8, and chroma of 4 to 6
Texture of the fine-earth fraction—loamy coarse sand, coarse sand, very coarse sand, or stratified with these textures
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of gray

Downer Series

Drainage class: Well drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Flats, knolls, and hills
Parent material: Loamy or gravelly fluviomarine deposits, or both (fig. 12)
Slope range: 0 to 10 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, mesic Typic Hapludults

Typical Pedon

Downer loamy sand, in an area of Downer loamy sand, 0 to 5 percent slopes, in Cumberland County, New Jersey; south of Bridgeton, 1,650 feet west of the intersection of Trench Road (County Road 699) and Cubby Hollow Road, 660 feet north of Trench Road, in an idle field; USGS Port Elizabeth topographic quadrangle; lat. 39 degrees 22 minutes 30 seconds N. and long. 74 degrees 58 minutes 35 seconds W.

Figure 12.—A profile of a Downer soil. Downer soils formed in loamy or gravelly fluviomarine sediments.

Ap—0 to 10 inches; dark grayish brown (10YR 4/2) loamy sand; weak fine granular structure; very friable; nonsticky, nonplastic; many fine roots; slightly acid; abrupt smooth boundary.

BA—10 to 16 inches; yellowish brown (10YR 5/6) loamy sand; very weak medium subangular blocky structure; very friable; nonsticky, nonplastic; common fine roots; slightly acid; clear wavy boundary.

Bt—16 to 36 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; nonsticky, nonplastic; common fine roots; clay

bridges between sand grains; 5 percent quartzite gravel; moderately acid; clear wavy boundary.

C1—36 to 48 inches; yellowish brown (10YR 5/6) loamy sand; single grain; loose; nonsticky, nonplastic; few fine roots; 10 percent quartzite gravel; very strongly acid; clear smooth boundary.

C2—48 to 80 inches; yellowish brown (10YR 5/6) sand with strong brown (7.5YR 5/6) sandy loam lenses; single grain; loose; nonsticky, nonplastic; 10 percent quartzite gravel; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 14 percent in the A horizon and 0 to 25 percent in the B and C horizons; mostly quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

Ap or A horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 2 to 4
Texture of the fine-earth fraction—loamy sand or sandy loam

BA or BE horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture of the fine-earth fraction—loamy sand or sandy loam

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—sandy loam

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 4 to 8; thin bands or variegations in shades of these colors in some pedons
Texture of the fine-earth fraction—loamy sand, sand, or stratified sand and sandy loam

Evesboro Series

Drainage class: Excessively drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Knolls and hills
Parent material: Sandy eolian deposits or sandy fluviomarine deposits, or both (fig. 13)
Slope range: 0 to 25 percent

Taxonomic class: Mesic, coated Typic Quartzipsamments

Typical Pedon

Evesboro sand, in an area of Evesboro sand, 0 to 5 percent slopes, in Cumberland County, New Jersey; 1.1 miles west of State Route 55 on Sherman Avenue to mile marker post 8, about 100 feet south of Sherman Avenue, in Union Lake Wildlife Management Area, in a wooded area; USGS Millville topographic quadrangle; lat. 39 degrees 26 minutes 45 seconds N. and long. 75 degrees 05 minutes 04 seconds W.

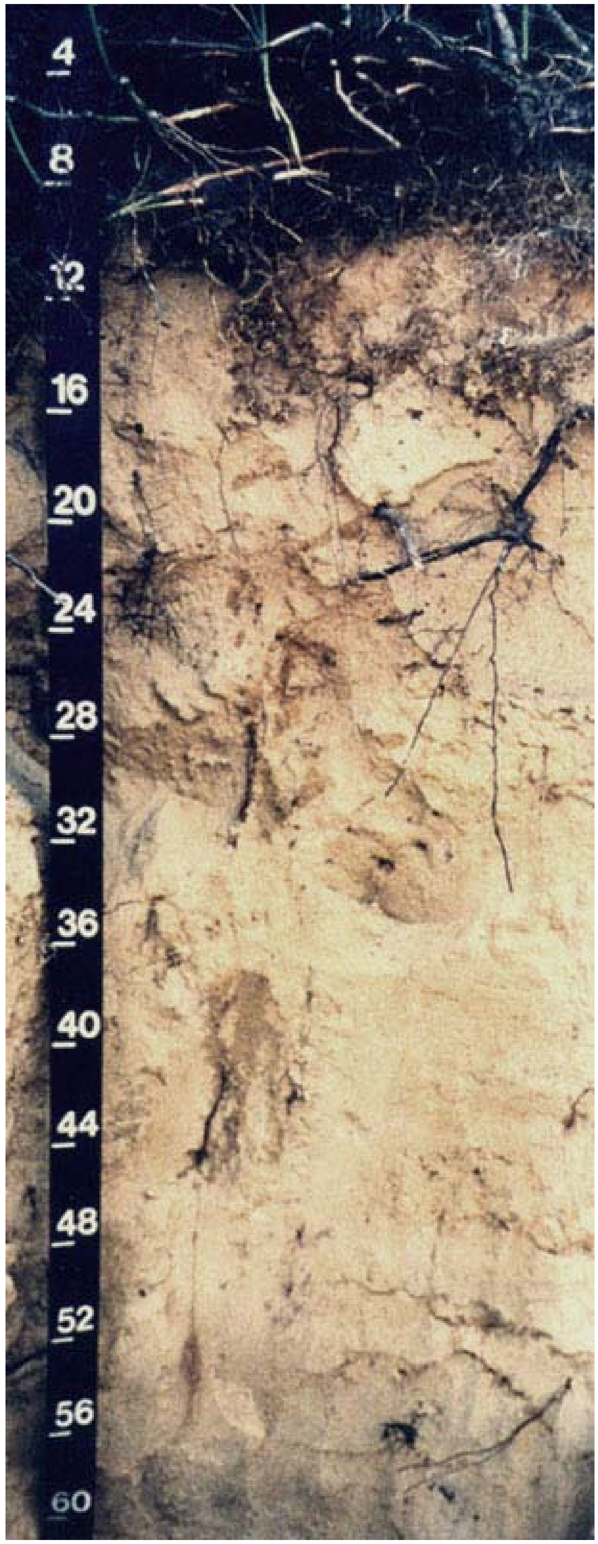

Figure 13.—A profile of an Evesboro soil. Evesboro soils formed in sandy eolian or sandy fluviomarine deposits, or both.

A—0 to 4 inches; grayish brown (10YR 5/2) sand; single grain; loose; nonsticky, nonplastic; common fine roots; many clean uncoated white (10YR 8/1) sand grains; extremely acid; clear smooth boundary.
AB—4 to 17 inches; brown (10YR 5/3) sand; single grain; loose; nonsticky, nonplastic; common fine roots; few coated sand grains; very strongly acid; gradual smooth boundary.
Bw—17 to 31 inches; yellowish brown (10YR 5/4) sand; massive; very friable; nonsticky, nonplastic; common fine and medium roots; many coated sand grains; strongly acid; gradual smooth boundary.
C—31 to 80 inches; light yellowish brown (10YR 6/4) and yellowish brown (10YR 5/4) stratified loamy sand and sand; single grain; loose; nonsticky, nonplastic; few very fine roots; many clean uncoated sand grains; 3 percent white rounded quartzite pebbles up to 1 inch in diameter; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 14 percent, by volume, in the A and B horizons and 0 to 25 percent in the C horizon; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid or very strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR, value of 3 to 6, and chroma of 1 to 4
Texture—sand

AB, BA, or E horizon:
Color—hue of 10YR, value of 5 or 6, and chroma of 2 to 6
Texture—sand

Bw horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—sand or loamy sand

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 6
Texture of the fine-earth fraction—sand, loamy sand, or stratified loamy sand and sand; includes sandy loam below a depth of 40 inches in some pedons

Fallsington Series

Drainage class: Poorly drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats and depressions
Parent material: Loamy fluviomarine deposits
Slope range: 0 to 5 percent

Taxonomic class: Fine-loamy, mixed, active, mesic Typic Endoaquults

Typical Pedon

Fallsington loam, in an area of Othello and Fallsington soils, 0 to 2 percent slopes, in Cumberland County, New Jersey; 0.4 mile southwest of Center Grove on Cedarville Road and 30 feet north of the road, in a wooded area; USGS Cedarville topographic

quadrangle; lat. 39 degrees 16 minutes 40 seconds N. and long. 75 degrees 10 minutes 56 seconds W.

Oe—0 to 2 inches; dark reddish brown (5YR 2.5/2) mucky peat; moderate medium granular structure; very friable; many fine roots; extremely acid; abrupt smooth boundary.
A—2 to 5 inches; very dark brown (10YR 2/2) loam; moderate fine and medium granular structure; friable; nonsticky, nonplastic; many fine roots; 3 percent rounded quartzite pebbles; extremely acid; clear smooth boundary.
E—5 to 8 inches; brown (10YR 5/3) sandy loam; moderate fine and medium subangular blocky structure; friable; nonsticky, nonplastic; many fine and medium roots; 5 percent rounded quartzite pebbles; extremely acid; clear smooth boundary.
Btg1—8 to 14 inches; light brownish gray (2.5Y 5/2) sandy loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine roots; 5 percent rounded quartzite pebbles; very strongly acid; clear wavy boundary.
Btg2—14 to 31 inches; light gray (2.5Y 6/2) sandy clay loam; moderate medium subangular blocky structure; firm; moderately sticky, moderately plastic; common medium prominent brown (10YR 5/8) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; 10 percent rounded quartzite pebbles; very strongly acid; abrupt smooth boundary.
Cg1—31 to 62 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; 5 percent rounded quartzite pebbles; very strongly acid; abrupt smooth boundary.
Cg2—62 to 80 inches; light brownish gray (10YR 6/2) gravelly sand; single grain; loose; nonsticky, nonplastic; 20 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Content of rock fragments: 0 to 10 percent, by volume, in the O, A, and B horizons and 0 to 20 percent in the C horizon; mostly rounded quartzite gravel.
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 3
Type of organic soil material—mucky peat

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 2 to 6, and chroma of 1 to 3
Texture—sandy loam or loam

E or Eg horizon:
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture—sandy loam

Btg horizon:
Color—hue of 10YR to 5Y, value of 3 to 7, and chroma 1 or 2 or is neutral with value of 4 to 8
Texture—loam, sandy loam, or sandy clay loam
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Cg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture of the fine-earth fraction—sand, sandy loam, or loamy sand
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Fluvaquents

Drainage class: Poorly drained
Permeability: Moderate and moderately rapid
Landscape: Coastal plain
Landform: Flood plains
Parent material: Loamy alluvium
Slope range: 0 to 3 percent

Taxonomic Class: Fluvaquents

Typical Pedon

Fluvaquents, in a wooded area of Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded, in Gloucester County, New Jersey; about 2.7 miles southwest on Swedesboro Road from the intersection of Swedesboro and Democrat Roads, 2.0 miles southeast of the intersection of Swedesboro and Tomlin Roads on Tomlin Road, about 1,500 feet southwest along a railroad track, and 100 feet south of the railroad track; USGS Bridgeport topographic quadrangle; lat. 39 degrees 46 minutes 33 seconds N. and long. 75 degrees 16 minutes 36 seconds W.

A—0 to 5 inches; very dark grayish brown (10YR 3/2) loam; moderate fine granular structure; friable; few fine distinct red (2.5YR 4/6) masses with accumulated iron and manganese oxide; strongly acid; clear smooth boundary.
AB—5 to 12 inches; dark gray (10YR 4/1) silt loam; moderate fine granular structure; friable; many fine distinct red (2.5YR 4/6) masses with accumulated iron and manganese oxide; strongly acid; clear smooth boundary.
Bw1—12 to 18 inches; grayish brown (2.5Y 5/2) sandy clay loam; massive; friable; many medium prominent yellowish red (5YR 4/6) masses with accumulated iron and manganese oxide; strongly acid; clear wavy boundary.
Bw2—18 to 24 inches; dark yellowish brown (10YR 4/6) sandy clay loam; massive; friable; common medium distinct light brownish gray (2.5Y 6/2) iron depletions; many medium distinct strong brown (7.5YR 4/6) masses with accumulated iron and manganese oxide; strongly acid; gradual wavy boundary.
C—24 to 50 inches; light brownish gray (2.5Y 6/2) sandy loam; massive; friable; many medium prominent strong brown (7.5YR 4/6) masses with accumulated iron and manganese oxide; strongly acid.

Range in Characteristics

Thickness of the solum: 6 to more than 30 inches
Depth to bedrock: More than 60 inches
Content of rock fragments: 0 to 35 percent gravel, by volume, throughout the soil
Reaction: Very strongly acid to moderately acid
Permeability: Varies

A horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 4, and chroma of 1 to 6
Texture—varies

Redoximorphic features—masses with accumulated iron and manganese oxide in shades of dark red
Structure—weak and moderate granular

Bw horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 3 to 6
Texture—varies
Redoximorphic features—iron depletions in shades of light brownish gray and masses with accumulated iron and manganese oxide in shades of strong brown to yellowish red
Structure—massive

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 2 to 6
Texture—varies
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of dark brown
Structure—massive

Freehold Series

Drainage class: Well drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats, knolls, and hills
Parent material: Glauconite-bearing loamy eolian deposits or glauconite-bearing loamy fluviomarine deposits, or both
Slope range: 0 to 40 percent

Taxonomic class: Fine-loamy, mixed, active, mesic Typic Hapludults

Typical Pedon

Freehold loamy sand, in an area of Freehold loamy sand, 0 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; about 1.3 miles northwest of the intersection of Kings Highway and Oldmans Creek Road on Oldmans Creek Road and 1,000 feet southwest of Oldmans Creek Road; USGS Woodstown topographic quadrangle, lat. 39 degrees 43 minutes 16 seconds N. and long. 75 degrees 20 minutes 59 seconds W.

Ap—0 to 10 inches; dark yellowish brown (10YR 4/4) loamy sand; weak fine granular structure; very friable; 2 percent glauconite pellets; 2 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.
Bt1—10 to 14 inches; yellowish brown (10YR 5/4) sandy loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; 5 percent glauconite pellets; 2 percent rounded quartzite pebbles; strongly acid; gradual wavy boundary.
Bt2—14 to 21 inches; olive brown (2.5Y 4/4) sandy clay loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; 5 percent glauconite pellets; 2 percent rounded quartzite pebbles; strongly acid; gradual wavy boundary.
Bt3—21 to 35 inches; olive brown (2.5Y 4/4) sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; few faint clay films on faces of peds; 5 percent glauconite pellets; 2 percent rounded quartzite pebbles; strongly acid; gradual wavy boundary.

C—35 to 80 inches; light olive brown (2.5Y 5/4) loamy sand; massive; very friable; 5 percent glauconite pellets; 2 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 5 percent, by volume, throughout the profile; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile
Content of glauconite: 2 to 10 percent glauconite pellets, by volume, in the mineralogy control section

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue 10YR or 2.5Y, value of 4 or 5, and chroma of 2 to 4
Texture—loamy sand, sandy loam, or sandy clay loam

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam, sandy clay loam, or loam

C horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—loamy sand or stratified loamy sand and sandy loam

Glassboro Series

Drainage class: Somewhat poorly drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Flats, depressions, and drainageways
Parent material: Loamy fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, mesic Aeric Endoaquults

Typical Pedon

Glassboro sandy loam, in an area of Woodstown-Glassboro complex, 0 to 2 percent slopes, in an idle field in Gloucester County, New Jersey; about 0.6 mile southwest on Swedesboro-House Road from the intersection of Swedesboro-House Road and Democrat Road and 200 feet southwest of the road; USGS Bridgeport topographic quadrangle; lat. 39 degrees 48 minutes 11 seconds N. and long. 75 degrees 16 minutes 31 seconds W.

Ap—0 to 11 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; very friable; slightly sticky, nonplastic; many fine and very fine roots; few fine and very fine flakes of mica; 3 percent rounded quartzite pebbles; slightly acid; abrupt smooth boundary.
Bt1—11 to 16 inches; yellowish brown (10YR 5/4) sandy loam; moderate medium subangular blocky structure; very friable; slightly sticky, nonplastic; common fine and very fine roots; few continuous very faint clay bridges between sand grains; common medium distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide and common medium distinct pale brown (10YR 6/3)

iron depletions; few fine and very fine flakes of mica; 3 percent rounded quartzite pebbles; slightly acid; clear smooth boundary.

Bt2—16 to 21 inches; light yellowish brown (2.5Y 6/3) coarse sandy loam; moderate medium subangular blocky structure; very friable; slightly sticky, nonplastic; few very fine roots; few continuous very faint clay bridges between sand grains; common medium distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide and common medium distinct light brownish gray (10YR 6/2) iron depletions; 2 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.

Btg—21 to 26 inches; light brownish gray (10YR 6/2) coarse sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, nonplastic; few continuous very faint clay bridges between sand grains; many medium prominent strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide; few fine and very fine flakes of mica; 2 percent rounded quartzite pebbles; very strongly acid; abrupt smooth boundary.

Cg—26 to 40 inches; light brownish gray (10YR 6/2) loamy coarse sand; single grain; loose; nonsticky, nonplastic; common medium distinct strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; common fine and very fine flakes of mica; 10 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

C1—40 to 56 inches; light yellowish brown (10YR 6/4) coarse sand; single grain; loose; nonsticky, nonplastic; many coarse distinct strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide and common medium distinct light gray (10YR 6/1) iron depletions; common fine and very fine flakes of mica; 10 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

C2—56 to 80 inches; strong brown (7.5YR 5/6) gravelly coarse sand; single grain; loose; nonsticky, nonplastic; common fine and very fine flakes of mica; 15 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 12 to 18 inches
Content of rock fragments: 0 to 10 percent, by volume, in the A and B horizons and 0 to 25 percent in the C horizon
Reaction: Unless limed, extremely acid to strongly acid throughout
Content of glauconite: 0 to 2 percent, by volume, glauconite pellets
Content of mica: 0 to 20 percent, by volume, throughout

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 4
Texture—sandy loam

Bt horizon:
Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 3 to 8
Texture—fine sandy loam, sandy loam, coarse sandy loam, or loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive, gray, or white

Btg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral

Texture of the fine-earth fraction—sandy loam or coarse sandy loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

Cg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral
Texture of the fine-earth fraction—loamy sand or loamy coarse sand
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 4 to 8
Texture of the fine-earth fraction—sand, loamy sand, loamy coarse sand, or coarse sand
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

Hammonton Series

Drainage class: Moderately well drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Flats, depressions, and drainageways
Parent material: Loamy fluviomarine deposits
Slope range: 0 to 5 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, mesic Aquic Hapludults

Typical Pedon

Hammonton loamy sand, in an area of Hammonton loamy sand, 0 to 5 percent slopes, in Atlantic County, New Jersey; near Corbin City, about 150 feet northeast of Aetna Road and 0.5 mile northwest of the junction with Carl Road, in an idle field; USGS Tuckahoe topographic quadrangle; lat. 39 degrees 18 minutes 03 seconds N. and long. 74 degrees 46 minutes 03 seconds W.

Ap—0 to 8 inches; very dark grayish brown (2.5Y 3/2) loamy sand; weak medium granular structure; very friable; nonsticky, nonplastic; many fine roots; very strongly acid; abrupt smooth boundary.

E—8 to 18 inches; yellowish brown (10YR 5/4) loamy sand; weak fine granular structure; very friable; nonsticky, nonplastic; many fine roots; very strongly acid; gradual wavy boundary.

Bt—18 to 36 inches; yellowish brown (10YR 5/6) sandy loam; weak fine subangular blocky structure; friable; slightly sticky, nonplastic; common fine roots; few faint clay films on peds or lining pebble niches; common clay bridges in upper part of horizon decrease with depth; common medium prominent light gray (5Y 7/2) irregularly shaped iron depletions with clear boundaries; common medium distinct brownish yellow (10YR 6/8) irregularly shaped masses that have accumulations of iron and manganese oxide with diffuse boundaries throughout; 3 percent rounded quartzite pebbles; very strongly acid; gradual wavy boundary.

C—36 to 80 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; few fine roots; few medium prominent light gray (5Y 7/2) irregularly shaped iron depletions with clear boundaries; few medium faint brownish yellow (10YR 6/8) irregularly shaped masses that have accumulations of iron and manganese oxide with diffuse boundaries throughout; 5 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 18 to 42 inches
Content of rock fragments: 0 to 20 percent, by volume, in the A and B horizons and 0 to 40 percent in the C horizon; mostly quartzite pebbles
Reaction: Unless limed, extremely acid to moderately acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4 or is neutral with value of 3 to 6
Texture—loamy sand

E or BE horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 2 to 8
Texture of the fine-earth fraction—loamy sand

Bt horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 7, and chroma of 3 to 8
Texture of the fine-earth fraction—sandy loam
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

C horizon:
Color—hue of 7.5YR to 5Y, value of 5 to 8, and chroma of 3 to 8
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Jade Run Series

Drainage class: Poorly drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Flats
Parent material: Loamy eolian deposits or loamy fluviomarine deposits, or both
Slope range: 0 to 2 percent

Taxonomic class: Coarse-loamy, mixed, active, acid, mesic Typic Endoaquepts

Typical Pedon

Jade Run fine sandy loam, in an area of Jade Run fine sandy loam, 0 to 2 percent slopes, in Burlington County, New Jersey; about 1.5 miles southeast from the intersection of U.S. Highway 206 and Retreat Road on Retreat Road and 500 feet south of the road, in an idle field; USGS Pemberton topographic quadrangle; lat. 39 degrees 55 minutes 24 seconds N. and long. 74 degrees 43 minutes 59 seconds W.

Ap—0 to 11 inches; very dark grayish brown (10YR 3/2) fine sandy loam; light brownish gray (10YR 6/2) dry; moderate medium granular structure; very friable; slightly sticky, slightly plastic; many fine and very fine roots; few fine prominent brown (7.5YR 4/4) masses with accumulated iron and manganese oxide along

root channels; 1 percent rounded quartzite pebbles; slightly acid; abrupt smooth boundary.

Bg1—11 to 19 inches; grayish brown (10YR 5/2) very fine sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; common fine and few very fine roots; common medium distinct brownish yellow (10YR 6/6) and few fine prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; 1 percent rounded quartzite pebbles; slightly acid; clear smooth boundary.

Bg2—19 to 23 inches; light brownish gray (10YR 6/2) very fine sandy loam; weak medium subangular blocky structure; very friable; slightly sticky, slightly plastic; few very fine roots; common medium distinct brownish yellow (10YR 6/6) and few fine prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; 1 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.

Bg3—23 to 28 inches; light brownish gray (10YR 6/2) very fine sandy loam; weak medium angular blocky structure; very friable; slightly sticky, slightly plastic; many coarse distinct brownish yellow (10YR 6/8) and common medium prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; 1 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

Bg4—28 to 35 inches; light brownish gray (2.5Y 6/2) very fine sandy loam; weak medium angular blocky structure; very friable; slightly sticky, slightly plastic; common medium distinct olive yellow (2.5Y 6/6) masses with accumulated iron and manganese oxide; 1 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

BCg—35 to 52 inches; light gray (2.5Y 7/1) very fine sandy loam; massive; very friable; slightly sticky, slightly plastic; common coarse distinct pale olive (5Y 6/3) masses with accumulated iron and manganese oxide; 1 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

2Cg—52 to 65 inches; light gray (5Y 7/2) sand; single grain; loose; nonsticky, nonplastic; many coarse distinct olive yellow (2.5Y 6/6) masses with accumulated iron and manganese oxide; 1 percent glauconite pellets; 3 percent rounded quartzite pebbles; strongly acid.

2C—65 to 80 inches; pale olive (5Y 6/3) sand; single grain; loose; nonsticky, nonplastic; 2 percent glauconite pellets; 10 percent rounded quartzite pebbles; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Depth to lithologic discontinuity: 25 to more than 60 inches; nonconforming 2C horizon typically contains coarse sands of differing marine origin than the overlying soil parent material
Content of rock fragments: 0 to 5 percent, by volume, in the A and B horizons and 0 to 25 percent in the C horizon
Reaction: Unless limed, extremely acid to strongly acid throughout
Content of glauconite: 0 to 2 percent pellets, by volume, throughout
Content of mica: 0 to 20 percent, by volume, throughout

O horizon (if it occurs):
Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or is neutral with value of 2 to 4
Type of organic soil material—mucky peat or muck

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 2 or 3, and chroma of 1 to 3
Texture—fine sandy loam

Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red or brown and iron depletions in shades of gray

Bg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture—sandy loam, fine sandy loam, very fine sandy loam, silt loam, or loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

BCg horizon:
Color—hue of 10YR to 5GY, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture—loamy fine sand, loamy very fine sand, or very fine sandy loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive

2Cg horizon:
Color—hue of 10YR to 5GY, value of 5 to 8, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of gray

2C horizon:
Color—hue of 10YR to 5Y, value of 5 to 8, and chroma of 3 to 6
Texture of the fine-earth fraction—sand, coarse sand, or loamy coarse sand
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of gray

Keyport Series

Drainage class: Moderately well drained
Permeability: Slow to moderately rapid
Landscape position: Flats, depressions, and knolls
Parent material: Silty and clayey eolian deposits or silty and clayey fluviomarine deposits, or both
Slope range: 0 to 10 percent

Taxonomic class: Fine, mixed, semiactive, mesic Aquic Hapludults

Typical Pedon

Keyport sandy loam, in an area of Keyport sandy loam, 2 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; about 1 mile southwest of the intersection of Monroeville Road and State Highway 45 on Monroeville Road and 750 feet southwest of Monroeville Road; USGS Woodstown topographic quadrangle; lat. 39 degrees 41 minutes 23 seconds N. and long. 75 degrees 15 minutes 32 seconds W.

Ap—0 to 12 inches; brown (10YR 5/3) sandy loam; moderate medium granular structure; very friable; slightly sticky, slightly plastic; many fine and medium roots; 3 percent quartzite gravel; slightly acid; abrupt smooth boundary.
Bt1—12 to 18 inches; yellowish brown (10YR 5/6) clay; moderate medium subangular blocky structure; firm; sticky, plastic; few fine and medium roots; common faint

clay films on faces of peds; 1 percent quartzite gravel; slightly acid; gradual smooth boundary.

Bt2—18 to 24 inches; brownish yellow (10YR 6/6) clay; moderate medium subangular blocky structure; firm; sticky, plastic; few fine and medium roots; common faint clay films on faces of peds; 1 percent quartzite gravel; strongly acid; gradual smooth boundary.

Bt3—24 to 32 inches; yellowish brown (10YR 5/6) clay; moderate medium subangular blocky structure; firm; sticky, plastic; few fine and medium roots; common faint clay films on faces of peds; common medium distinct yellowish red (5YR 5/6) masses with accumulated iron and manganese oxide and few medium distinct light gray (10YR 7/1) iron depletions; strongly acid; gradual smooth boundary.

Bt4—32 to 41 inches; brownish yellow (10YR 6/8) clay; moderate medium subangular blocky structure; firm; sticky, plastic; few fine roots; common faint clay films on faces of peds; common medium distinct yellowish red (5YR 5/6) masses with accumulated iron and manganese oxide and common medium distinct light gray (10YR 7/1) iron depletions; strongly acid; clear smooth boundary.

Cg1—41 to 55 inches; light gray (2.5YR 7/1) silty clay loam; massive; friable; sticky, plastic; many coarse prominent strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide; strongly acid; gradual smooth boundary.

Cg2—55 to 80 inches; light gray (2.5YR 7/2) silty clay loam; massive; friable; sticky, plastic; common fine prominent strong brown (7.5YR 5/6) and many coarse distinct light yellowish brown (10YR 6/4) masses with accumulated iron and manganese oxide; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: 18 to 42 inches
Content of rock fragments: 0 to 5 percent throughout; mostly rounded quartzite
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 to 4
Texture—sandy loam, loam, or sandy clay loam

Bt horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 7, and chroma of 0 to 8
Texture—clay, silty clay, clay loam, or silty clay loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown and iron depletions in shades of gray

Cg horizon:
Color—hue of 10YR to 5Y, value of 2 to 7, and chroma of 0 to 8
Texture—silty clay loam, clay loam, or stratified silty clay loam and loamy sand
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown and iron depletions in shades of gray

Kresson Series

Drainage class: Somewhat poorly drained
Permeability: Slow to moderately rapid

Landscape: Coastal plain
Landform: Flats and depressions
Parent material: Glauconitic clayey marine or glauconitic clayey fluviomarine deposits, or both
Slope range: 0 to 2 percent

Taxonomic class: Fine, glauconitic, mesic Aquic Hapludults

Typical Pedon

Kresson fine sandy loam, in a wooded area of Kresson fine sandy loam, 0 to 2 percent slopes, in Gloucester County, New Jersey; 0.2 mile north of the intersection of State Highway 41 and State Highway 47 at Fairview, on State Highway 41, and 350 feet east of State Highway 41; USGS Runnemede Quadrangle; lat. 39 degrees 47 minutes 47 seconds N. and long. 75 degrees 05 minutes 51 seconds W.

A—0 to 6 inches; very dark grayish brown (2.5Y 3/2) fine sandy loam; moderate medium granular structure; friable; slightly sticky, slightly plastic; common fine roots; 5 percent glauconite pellets; 10 percent rounded quartzite pebbles; strongly acid; clear smooth boundary.

Bt1—6 to 18 inches; olive (5Y 4/3) clay; moderate coarse prismatic structure parting to moderate medium angular blocky; firm; sticky, plastic; few fine roots; common fine distinct irregular pores; common continuous prominent clay films on faces of peds; common medium and coarse prominent strong brown (7.5YR 5/8) masses with accumulated iron and manganese oxide; 35 percent glauconite pellets; 10 percent rounded quartzite pebbles; very strongly acid; gradual smooth boundary.

Bt2—18 to 33 inches; dark greenish gray (5G 3/1) clay; strong coarse prismatic structure parting to strong medium angular blocky; firm; sticky, plastic; few fine roots; common fine distinct irregular pores; many continuous prominent clay films on faces of peds; many medium and coarse prominent strong brown (7.5YR 5/6) and brown (7.5YR 4/4) masses with accumulated iron and manganese oxide; 45 percent glauconite pellets; very strongly acid; gradual smooth boundary.

Bt3—33 to 41 inches; dark grayish green (5G 3/2) clay; moderate coarse prismatic structure parting to moderate medium angular blocky; very firm; sticky, plastic; few fine distinct irregular pores; many continuous prominent clay films on faces of peds; common medium prominent brown (7.5YR 4/4) masses with accumulated iron and manganese oxide; 45 percent glauconite pellets; 2 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

C—41 to 80 inches; olive (5Y 4/3) and light yellowish brown (2.5Y 6/4) stratified sandy loam and sandy clay loam; massive; friable; nonsticky, nonplastic; 25 percent glauconite pellets; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 12 to 18 inches
Content of rock fragments: 0 to 14 percent, by volume, quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout; stratified black or greenish black layers within the C horizon may be ultra acid upon exposure to air
Content of glauconite: Generally, 3 to 10 percent pellets, by volume, in the A, Ap, BA, or BE horizons and much higher, 25 to 60 percent, in the Bt, BC, and C horizons; more than 20 percent in the mineralogy control section

O horizon (if it occurs):
Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or is neutral with value of 2 to 4
Type of organic soil material—mucky peat or muck

Ap or A horizon:
Color—hue of 5Y to 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—fine sandy loam

Bt horizon:
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6 or hue of 5GY to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture—clay, sandy clay, clay loam, or sandy clay loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less within the upper part of the Bt horizon, below a depth of 12 inches, in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

C horizon:
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6 or hue of 10Y to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture—stratified sandy loam and sandy clay loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less within the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

Lakehurst Series

Drainage class: Moderately well drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats and knolls
Parent material: Sandy fluviomarine deposits (fig. 14)
Slope range: 0 to 5 percent

Taxonomic class: Mesic, coated Aquodic Quartzipsamments

Typical Pedon

Lakehurst sand, in an area of Lakehurst sand, 0 to 5 percent slopes, in Cumberland County, New Jersey; 0.25 mile east of Willow Grove Lake to Roberts Drive, 50 feet south of Weymouth Road at the junction with Roberts Drive, in a wooded area; USGS Newfield topographic quadrangle; lat. 39 degrees 32 minutes 29 seconds N. and long. 75 degrees 03 minutes 57 seconds W.

Oi—0 to 2 inches; dark brown (5YR 4/3), slightly decomposed plant materials; many fine roots; extremely acid; abrupt smooth boundary.
A—2 to 4 inches; dark grayish brown (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; many fine roots; extremely acid; abrupt smooth boundary.
E—4 to 18 inches; gray (10YR 6/1) sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots; many uncoated sand grains; extremely acid; clear wavy boundary.
Bh—18 to 32 inches; strong brown (7.5YR 5/6) sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots; common coated sand grains; extremely acid; clear wavy boundary.
BC—32 to 45 inches; yellow (10YR 7/8) sand; single grain; loose; nonsticky, nonplastic; few fine roots; few medium distinct grayish brown (10YR 5/2)

irregularly shaped iron depletions with clear boundaries; common coated sand grains; very strongly acid; gradual wavy boundary.

C—45 to 54 inches; yellowish brown (10YR 5/4) sand; single grain; loose; nonsticky, nonplastic; few coarse distinct grayish brown (10YR 5/2) irregularly shaped iron depletions with clear boundaries throughout; few fine roots; very strongly acid; gradual smooth boundary.

Figure 14.—A profile of a Lakehurst soil. Lakehurst soils formed in sandy fluviomarine sediments deposited over marine sediments.

Cg—54 to 80 inches; light gray (10YR 6/1) sand; single grain; loose; nonsticky, nonplastic; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 18 to 42 inches
Content of rock fragments: 0 to 14 percent, by volume, in the A, E, and Bh horizons and 0 to 20 percent in the BC and C horizons; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon:
Type of organic soil material—slightly decomposed plant material

A or Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 5, and chroma of 1 or 2
Texture—sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—sand or fine sand

Bh horizon:
Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 to 6; the redder hue and lower value and chroma in the discontinuous, thin subhorizons in the uppermost part of the Bh horizon
Texture—sand, fine sand, or loamy sand

BC horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture of the fine-earth fraction—sand, loamy sand, or fine sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 6
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Cg horizon:
Color—hue of 7.5YR to 5Y, value of 5 to 7, and chroma of 1 or 2
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Lakewood Series

Drainage class: Excessively drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats and knolls
Parent material: Sandy fluviomarine deposits (fig. 15)
Slope range: 0 to 5 percent

Taxonomic class: Mesic, coated Spodic Quartzipsamments

Typical Pedon

Lakewood sand, in an area of Lakewood sand, 0 to 5 percent slopes, in Cumberland County, New Jersey; 1.1 miles east of State Highway 55 on State Route 49, about 600 feet north of State Route 49 along a dirt road, and 20 feet east of the road, in a wooded area; USGS Five Points topographic quadrangle; lat. 39 degrees 23 minutes 20 seconds N. and long. 74 degrees 59 minutes 30 seconds W.

A—0 to 3 inches; grayish brown (10YR 4/2) sand; single grain; loose; nonsticky, nonplastic; common fine roots; extremely acid; clear smooth boundary.

E—3 to 11 inches; light brownish gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; few fine and medium roots; extremely acid; clear irregular boundary.

Bh—11 to 13 inches; brown (7.5YR 5/4) loamy sand; massive; friable; nonsticky, nonplastic; common fine and medium roots; extremely acid; clear smooth boundary.

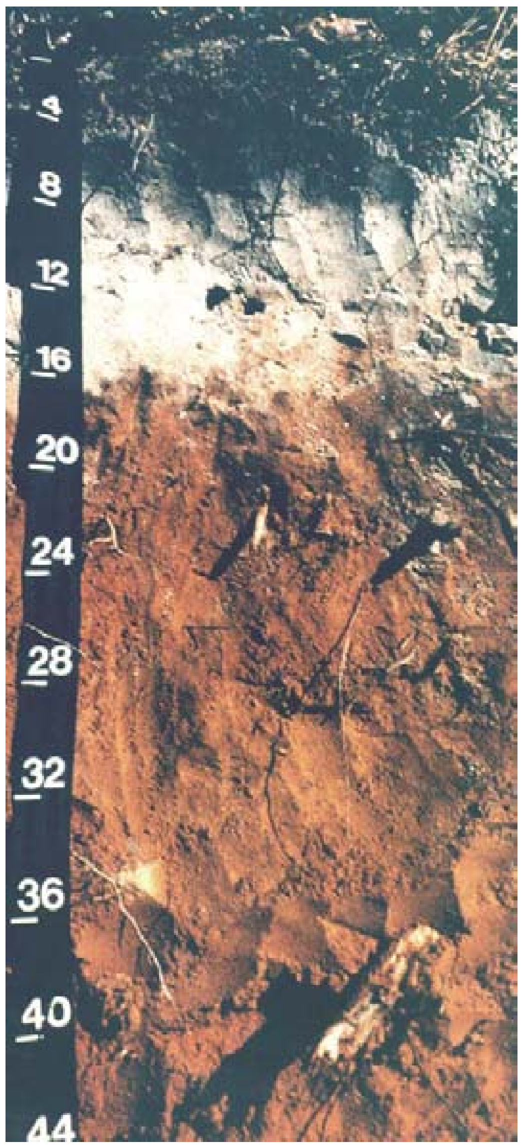

Figure 15.—A profile of a Lakewood soil. Lakewood soils formed in sandy fluviomarine sediments.

BC—13 to 30 inches; yellowish brown (10YR 5/6) sand; single grain; loose; nonsticky, nonplastic; common fine roots; very strongly acid; gradual smooth boundary.
C1—30 to 46 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; few fine roots; very strongly acid; gradual smooth boundary.
C2—46 to 80 inches; very pale brown (10YR 7/4) sand; single grain; loose; nonsticky, nonplastic; few fine roots; extremely acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 14 percent, by volume, in the A, E, and B horizons and 0 to 30 percent in the C horizon; mostly quartzite gravel
Thickness of the E horizon: 3 to more than 10 inches
Reaction: Unless limed, extremely acid or very strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2 or is neutral with value of 1 or 2
Texture—sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture—sand

Bh horizon:
Color—hue of 10YR to 5YR, value of 4 to 6, and chroma of 3 to 8
Texture—loamy sand

BC horizon (if it occurs):
Color—hue of 10YR to 5YR, value of 4 to 6, and chroma of 3 to 8
Texture—sand

C horizon:
Color—hue of 10YR to 2.5Y, value of 5 to 7, and chroma of 4 to 8
Texture of the fine-earth fraction—sand or loamy sand

Lenni Series

Drainage class: Poorly drained
Permeability: Slow to moderately rapid
Landscape: Coastal plain
Landform: Flats and depressions
Parent material: Clayey fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Fine, mixed, active, mesic Typic Endoaquults

Typical Pedon

Lenni loam, in an area of Lenni loam, 0 to 2 percent slopes, in Gloucester County, New Jersey; about 0.85 mile southwest of the intersection of Monroeville Road and State Highway 45, on Monroeville Road, and 1,050 feet southwest of Monroeville

Road, in an idle field; USGS Woodstown topographic quadrangle; lat. 39 degrees 41 minutes 26 seconds N. and long. 75 degrees 15 minutes 38 seconds W.

Ap—0 to 5 inches; very dark grayish brown (10YR 3/2) loam; moderate medium granular structure; very friable; slightly sticky, slightly plastic; many fine and medium roots; few fine prominent yellowish red (5YR 4/6) masses with accumulated iron and manganese oxide; 3 percent quartzite gravel; moderately acid; abrupt smooth boundary.

Btg1—5 to 10 inches; dark gray (10YR 4/1) clay loam; moderate medium subangular blocky structure; firm; sticky, plastic; many fine and common medium roots; common medium prominent yellowish red (5YR 4/6) masses with accumulated iron and manganese oxide; common faint clay films on faces of peds and in pores; 3 percent quartzite gravel; strongly acid; clear smooth boundary.

Btg2—10 to 18 inches; gray (10YR 5/1) clay; strong medium subangular blocky structure; firm; sticky, plastic; common fine roots; few fine prominent yellowish red (5YR 4/6) and few coarse prominent yellowish red (5YR 5/8) masses with accumulated iron and manganese oxide; common distinct clay films on faces of peds and in pores; 2 percent quartzite gravel; strongly acid; clear smooth boundary.

Btg3—18 to 33 inches; light brownish gray (10YR 6/2) clay loam; moderate medium subangular blocky structure; firm; sticky, plastic; few fine roots; common medium distinct brownish yellow (10YR 6/8) masses with accumulated iron and manganese oxide; few faint clay films on faces of peds and in pores; 2 percent quartzite gravel; very strongly acid; clear smooth boundary.

2Cg1—33 to 45 inches; gray (10Y 6/1) sandy loam; massive; very friable; slightly sticky, slightly plastic; common medium distinct yellow (10YR 7/8) masses with accumulated iron and manganese oxide; 2 percent quartzite gravel; very strongly acid; clear smooth boundary.

2Cg2—45 to 80 inches; gray (10Y 6/1) sandy loam; massive; very friable; slightly sticky, slightly plastic; common coarse prominent yellow (10YR 7/8) masses with accumulated iron and manganese oxide; 2 percent quartzite gravel; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Content of rock fragments: 0 to 5 percent, by volume; mostly quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout the profile

O horizon (if it occurs):
Type of organic soil material—peat, muck, or mucky peat

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 3 to 7, and chroma of 1 to 3 or is neutral with value of 3 to 7
Texture—loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Btg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 7
Texture—loam, silty clay loam, clay loam, silty clay, or clay
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

2Cg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral with value of 3 to 7
Texture—sandy loam, coarse sandy loam, loamy fine sand, or loamy sand
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Manahawkin Series

Drainage class: Very poorly drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Swamps and flood plains
Parent material: Organic, woody material over sandy alluvium
Slope range: 0 to 2 percent

Taxonomic class: Sandy or sandy-skeletal, siliceous, dysic, mesic Terric Haplosaprists

Typical Pedon

Manahawkin muck, in an area of Manahawkin muck, 0 to 2 percent slopes, frequently flooded, in Cumberland County, New Jersey; 225 feet east of Manantico Creek Bridge on Hance Bridge Road and 30 feet south of the road, in a wooded area; USGS Five Points topographic quadrangle; lat. 39 degrees 27 minutes 02 seconds N. and long. 74 degrees 57 minutes 20 seconds W.

Oa1—0 to 13 inches; black (5YR 2.5/1) muck; about 10 percent fibers, less than 2 percent when rubbed; moderate medium granular structure; many fine and medium roots; 80 percent organic material; extremely acid; clear smooth boundary.
Oa2—13 to 26 inches; black (5YR 2.5/1) muck; about 10 percent fibers, less than 2 percent when rubbed; weak medium granular structure; common fine and medium roots; 80 percent organic material; very strongly acid; gradual smooth boundary.
Oa3—26 to 47 inches; black (5YR 2.5/1) muck; about 15 percent fibers, less than 2 percent when rubbed; massive; 80 percent organic material; 20 percent soft woody fragments up to 3/4 inch in diameter; very strongly acid; abrupt smooth boundary.
Cg—47 to 80 inches; gray (10YR 6/2) sand; single grain; loose; nonsticky, nonplastic; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 to 5 percent, by volume, in the O horizon and 0 to 50 percent, by volume, in the Cg horizon; mostly quartzite gravel
Thickness of the organic horizons: 16 to 51 inches
Content of woody fragments throughout the profile: 0 to 50 percent, by volume, in the organic layers; mostly twigs, branches, or logs that range in size from 1/8 inch to 20 inches in diameter and completely break down when rubbed or crushed
Reaction: Extremely acid to strongly acid

Oi or Oe horizon (if it occurs):
Type of organic soil material—peat or mucky peat

Oa horizon:
Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 or 3; similar colors when broken face and rubbed but may differ one or two units in value or chroma
Type of organic soil material—muck

Cg horizon:
Color—hue of 7.5YR or 10YR, value of 2 to 5, and chroma of 1 to 4 or is neutral with value of 2 to 5
Texture of the fine-earth fraction—sand or loamy sand

Mannington Series

Drainage class: Very poorly drained
Permeability: Moderately slow and moderate
Landscape: Coastal plain
Landform: Tidal flats
Landform position: Nearly level flats and slightly concave drainageways
Parent material: Silty estuarine deposits over organic, herbaceous materials
Slope range: 0 to 1 percent

Taxonomic class: Fine-silty, mixed, active, nonacid, mesic Thapto-Histic Hydraquents

Typical Pedon

Mannington mucky silt loam, in an area of Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded, in Salem County, New Jersey; 0.75 mile south of the state boat ramp, off Hook Road in Kates Creek Meadow, in a wooded area; USGS Penns Grove topographic quadrangle; lat. 39 degrees 37 minutes 43 seconds N. and long. 75 degrees 28 minutes 41 seconds W.

Ag—0 to 14 inches; very dark gray (5Y 3/1) mucky silt loam; massive; friable; slightly sticky, slightly plastic; many very fine, fine, and medium roots; n-value more than 1.0, material flows between the fingers easily when squeezed; 15 percent organic matter; moderately acid; clear smooth boundary.
Cg—14 to 32 inches; dark gray (5Y 4/1) silt loam; massive; friable; slightly sticky, slightly plastic; few very fine and fine roots; n-value more than 1.0, material flows between the fingers easily when squeezed; 8 percent organic matter; moderately acid; gradual smooth boundary.
Oa—32 to 42 inches; black (5YR 2.5/1) muck; fiber content 15 percent of the soil volume after rubbing; 10 percent, by weight, mineral soil material; strongly acid; clear smooth boundary.
Oe—42 to 52 inches; very dark gray (5YR 3/1) mucky peat; fiber content 20 percent of the soil volume after rubbing; massive; 15 percent, by weight, mineral soil material; slightly acid; abrupt smooth boundary.
C'g1—52 to 62 inches; dark gray (5Y 4/1) mucky silt loam; massive; friable; slightly sticky, slightly plastic; n-value more than 1.0, material flows easily between the fingers when squeezed; 15 percent organic matter; moderately acid; gradual smooth boundary.
C'g2—62 to 90 inches; dark gray (5Y 4/1) silt loam; massive; friable; slightly sticky, slightly plastic; n-value more than 1.0, material flows easily between the fingers when squeezed; 10 percent organic matter; moderately acid.

Range in Characteristics

Depth to bedrock: More than 90 inches

Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 to 5 percent, by volume, throughout; mainly quartzite gravel
Thickness of the mineral surface soil: 20 to 50 inches
Thickness of the buried organic material: 10 to 35 inches
Electrical conductivity throughout the profile: Less than 4 millimhos per centimeter
Reaction: Moderately acid to neutral throughout
Other features: n-value typically more than 1.0 but ranges from 0.7 to 1.0 in the C'g horizon

O horizon (if it occurs):
Type of organic soil material—peat or mucky peat

Ag horizon:
Color—hue of 10YR to 5GY, value of 2 to 4, and chroma of 1 or 2 or is neutral with value of 2 to 4
Texture—mucky silt loam
Redoximorphic features—iron depletions in shades of white or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive
Organic matter content—2 to 12 percent

Cg horizon:
Color—hue of 7.5YR to 5GY, value of 3 to 6, and chroma of 1 or 2 or is neutral with value of 4 to 6
Texture—silt loam, mucky silt loam, or silty clay loam
Redoximorphic features—iron depletions in shades of white or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive
Organic matter content—2 to 12 percent

Oa or Oe horizon:
Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 or 3
Type of organic soil material—muck or mucky peat (sapric or hemic soil materials)
Content of mineral material—10 to 50 percent

C'g horizon:
Color—hue of 10YR to 5GY, value of 3 to 6, and chroma of 1 or 2 or is neutral with value of 4 to 6
Texture—silt loam, mucky silt loam, silty clay loam, or stratified silt loam, silty clay loam, and sandy loam
Redoximorphic features—iron depletions in shades of white or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive
Organic matter content—2 to 12 percent

Marlton Series

Drainage class: Moderately well drained
Permeability: Slow to moderately rapid
Landscape: Coastal plain
Landform: Flats, knolls, depressions, and drainageways
Parent material: Glauconitic clayey marine or glauconitic clayey fluviomarine deposits, or both

Slope range: 0 to 15 percent

Taxonomic class: Fine, glauconitic, mesic Aquic Hapludults

Typical Pedon

Marlton sandy loam, in an area of Marlton sandy loam, 2 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; about 1.4 miles northwest from the intersection of County Road 538 and State Highway 45 and 100 feet northeast of County Road 538; USGS Woodstown topographic quadrangle; lat. 39 degrees 43 minutes 38 seconds N. and long. 75 degrees 16 minutes 05 seconds W.

Ap—0 to 10 inches; olive gray (5Y 4/2) sandy loam; moderate medium granular structure; friable; slightly sticky, slightly plastic; many fine and very fine roots; common fine distinct interstitial pores; 10 percent glauconite pellets; 5 percent rounded quartzite pebbles; strongly acid; abrupt smooth boundary.

Bt1—10 to 20 inches; olive (5Y 4/3) clay; moderate coarse prismatic structure parting to moderate medium subangular blocky; very firm; sticky, plastic; common fine and very fine roots, mainly along structural faces; few fine distinct irregular pores; many continuous prominent clay films on all faces of peds; few continuous prominent pressure faces on vertical faces of peds; few medium distinct brown (7.5YR 4/4) masses with accumulated iron and manganese oxide in the lower part of the horizon; 35 percent glauconite pellets; 1 percent rounded quartzite pebbles; very strongly acid; gradual smooth boundary.

Bt2—20 to 28 inches; olive (5Y 4/4) clay; moderate coarse prismatic structure parting to moderate medium subangular blocky; very firm; sticky, plastic; few very fine roots, mainly along structural faces; few fine distinct irregular pores; many continuous prominent clay films on all faces of peds; few continuous prominent pressure faces on vertical faces of peds; common medium prominent strong brown (7.5YR 5/6) and few medium prominent dark reddish brown (5YR 3/4) masses with accumulated iron and manganese oxide; 45 percent glauconite pellets; 1 percent rounded quartzite pebbles; very strongly acid; gradual smooth boundary.

Bt3—28 to 47 inches; very dark grayish green (5G 3/2) clay; moderate coarse prismatic structure parting to moderate medium subangular blocky; very firm; sticky, plastic; few fine distinct irregular pores; many continuous prominent clay films on all faces of peds; few continuous prominent pressure faces on vertical faces of peds; common medium prominent dark reddish brown (5YR 3/4) masses with accumulated iron and manganese oxide; 50 percent glauconite pellets; 1 percent rounded quartzite pebbles; very strongly acid; clear smooth boundary.

C—47 to 80 inches; very dark greenish gray (5G 3/1), greenish black (10Y 2.5/1), and yellowish brown (10YR 5/6) stratified sandy loam and sandy clay loam; massive; friable to very friable; slightly sticky, slightly plastic; 60 percent glauconite pellets; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches

Depth to the seasonal high water table: 18 to 42 inches

Content of rock fragments: 0 to 14 percent, by volume, in the A horizon and 0 to 20 percent in the B and C horizons; mainly quartzite with occasional ironstone pebbles

Reaction: Unless limed, extremely acid to strongly acid throughout

Content of glauconite: Typically, 3 to 10 percent pellets, by volume, in the surface and subsurface layers and 20 to 60 percent in the subsoil and substratum; more than 20 percent, by volume, in the mineralogy control section

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

Ap or A horizon:
Color—hue of 5Y to 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—sandy loam or sandy clay loam

Bt horizon:
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6
Texture of the fine-earth fraction—clay, clay loam, sandy clay, or sandy clay loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; in some pedons gray or grayish brown iron depletions with chroma of 2 or less in the lower part of the Bt horizon, 24 inches below the upper boundary of this horizon; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

Btg horizon (if it occurs):
Color—hue of 5GY to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture—clay, clay loam, sandy clay, or sandy clay loam
Redoximorphic features—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown

C horizon:
Color—hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 3 to 6 or hue of 10Y to 5G, value of 2.5 to 6, and chroma of 1 or 2
Texture of the fine-earth fraction—stratified sandy loam and sandy clay loam
Redoximorphic features (if they occur)—masses with accumulated iron and manganese oxide in shades of red, yellow, brown, or olive and iron depletions in shades of olive or brown; gray or grayish brown iron depletions with chroma of 2 or less in the horizon in some pedons; difficult to distinguish iron depletions in most pedons because of the masking effects of the dark olive and dark greenish parent materials

Mullica Series

Drainage class: Very poorly drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Flats, drainageways, depressions, and flood plains
Parent material: Loamy and sandy fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, acid, mesic Typic Humaquepts

Typical Pedon

Mullica sandy loam, in an area of Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded, in Cape May County, New Jersey; 1.1 miles north of Delsea Drive (State Route 47) on Hands Mill Road and 30 feet southeast of the road, in a wooded area; USGS Heislerville topographic quadrangle; lat. 39 degrees 13 minutes 35 seconds N. and long. 74 degrees 57 minutes 36 seconds W.

Oe—0 to 2 inches; dark reddish brown (5YR 2.5/2) mucky peat; fine granular structure; many fine roots; extremely acid; abrupt smooth boundary.

Ag—2 to 9 inches; black (10YR 2/1) sandy loam; strong medium granular structure; very friable; slightly sticky, slightly plastic; many fine and medium roots; extremely acid; clear smooth boundary.
Bg1—9 to 14 inches; dark gray (10YR 4/1) sandy loam; moderate medium and coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common fine and medium roots; very strongly acid; clear smooth boundary.
Bg2—14 to 28 inches; gray (10YR 6/1) sandy loam; medium and coarse subangular blocky structure; friable; slightly sticky, slightly plastic; common medium and coarse roots; very strongly acid; clear smooth boundary.
Cg1—28 to 31 inches; gray (10YR 6/1) loamy sand; single grain; loose; nonsticky, nonplastic; few medium and coarse roots; very strongly acid; clear smooth boundary.
Cg2—31 to 40 inches; light gray (10YR 7/1) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; clear smooth boundary.
Cg3—40 to 80 inches; gray (10YR 6/1) gravelly loamy sand; single grain; loose; nonsticky, nonplastic; 30 percent quartzite gravel by volume; very strongly acid; clear smooth boundary.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 to 14 percent, by volume, in the A and B horizons and 0 to 34 percent in the C horizon; mostly quartzite gravel
Reaction: Extremely acid or very strongly acid

O horizon:
Color—Hue of 5YR to 10YR, value of 2.5 or 3, and chroma of 0 to 2
Type of organic soil material—mucky peat

Ag or Ap horizon:
Color—hue of 10YR to 5Y, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 or 3
Texture—sandy loam

Bg horizon:
Color—hue of 10YR to 5Y, value of 3 to 6, and chroma of 1 or 2 or is neutral with value of 3 to 6
Texture—sandy loam
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Cg horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 1 or 2 or is neutral with value of 3 to 6
Texture of the fine-earth fraction—sand, loamy sand, or stratified sand and loamy sand
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Nanticoke Series

Drainage class: Very poorly drained
Permeability: Moderately slow
Landscape: Coastal plain

Landform: Tidal flats
Parent material: Silty estuarine deposits over organic, herbaceous materials
Slope range: 0 to 1 percent

Taxonomic class: Fine-silty, mixed, active, nonacid, mesic Typic Hydraquents

Typical Pedon

Nanticoke mucky silt loam, in an area of Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded, in Salem County, New Jersey; 1.5 miles west of Slapes Corner, 0.5 mile northwest of Mt. Zion Church Cemetery, in the middle of Pine Island Meadow, in a wetland area; USGS Penns Grove topographic quadrangle; lat. 39 degrees 28 minutes 27 seconds N. and long. 75 degrees 27 minutes 58 seconds W.

Ag—0 to 5 inches; very dark gray (10YR 3/1) mucky silt loam; massive; friable; slightly sticky, slightly plastic; n-value more than 1.0; about 10 percent organic material; moderately acid; clear smooth boundary.
Cg1—5 to 50 inches; very dark gray (5Y 3/1) silt loam; massive; friable; slightly sticky, slightly plastic; n-value more than 1.0; about 5 percent organic material; moderately acid; gradual smooth boundary.
Cg2—50 to 80 inches; dark gray (5Y 4/1) silt loam; massive; friable; slightly sticky, slightly plastic; n-value more than 1.0; moderately acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 or 1 percent, by volume; mainly quartzite gravel
Electrical conductivity throughout the profile: Less than 4 millimhos per centimeter
n-values throughout the profile: More than 1.0
Reaction: Moderate acidly to neutral

O horizon (if it occurs):
Type of organic soil material—peat or mucky peat

Ag horizon:
Color—hue of 10YR to 5GY, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 to 4
Texture—mucky silt loam

Cg horizon:
Color—hue of 2.5Y to 5GY, value of 3 or 4, and chroma of 1 or 2 or is neutral with value of 3 to 5
Texture—silt loam or silty clay loam

Othello Series

Drainage class: Poorly drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats and depressions
Parent material: Silty eolian deposits over fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Fine-silty, mixed, active, mesic Typic Endoaquults

Typical Pedon

Othello silt loam, in an area of Othello and Fallsington soils, 0 to 2 percent slopes, in Salem County, New Jersey; 0.75 mile northeast of the intersection at Harding Highway (State Highway 40) and State Road 77 and 0.75 mile east of State Road 77, in a wooded area; USGS Pitman West topographic quadrangle; lat. 39 degrees 37 minutes 18 seconds N. and long. 75 degrees 12 minutes 20 seconds W.

Oe—0 to 1 inch; dark reddish brown (5YR 3/2) mucky peat; 70 percent fibers when rubbed; weak medium subangular blocky structure; extremely acid; abrupt smooth boundary.

A—1 to 13 inches; brown to dark brown (7.5YR 4/2) silt loam; moderate medium subangular blocky structure; friable; nonsticky, slightly plastic; few fine distinct strong brown (7.5YR 5/6) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; many medium and fine roots; extremely acid; abrupt smooth boundary.

Btg1—13 to 32 inches; light brownish gray (10YR 6/2) silt loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; common faint clay films; common medium distinct yellowish brown (10YR 5/4) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; common fine and very fine roots; extremely acid; gradual smooth boundary.

Btg2—32 to 40 inches; gray (10YR 5/1) silty clay loam; strong medium subangular blocky structure; friable; slightly sticky, slightly plastic; common faint clay films; common medium distinct brownish yellow (10YR 6/6) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; few fine and very fine roots; very strongly acid; gradual smooth boundary.

2C1—40 to 60 inches; brownish yellow (10YR 6/6) loamy sand; single grain; loose; nonsticky, nonplastic; many fine and medium prominent light gray to gray (N 6/0) irregularly shaped iron depletions and strong brown (7.5YR 5/8) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; very strongly acid; gradual smooth boundary.

2C2—60 to 80 inches; light brownish gray (10YR 6/3) sand; single grain; loose; nonsticky, nonplastic; many fine and medium prominent light gray to gray (N 6/0) irregularly shaped iron depletions and strong brown (7.5YR 5/8) irregularly shaped masses that have accumulations of iron and manganese oxide with clear boundaries throughout; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Seasonal high water table: Within a depth of 12 inches
Content of rock fragments: 0 to 5 percent, by volume, in the O and A horizons, 0 to 10 percent in the B horizon, and 0 to 20 percent in the C horizon; mainly quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid throughout

Oe horizon:
Color—hue of 5YR to 10YR, value of 2.5 or 3, and chroma of 0 to 2
Type of organic soil material—mucky peat

A or Ap horizon:
Color—hue of 7.5YR to 5Y, value of 3 or 4, and chroma of 1 to 3
Texture—silt loam

Btg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral with value of 5 to 7
Texture—silt loam or silty clay loam
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

2Cg horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral with value of 4 to 8
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

2C horizon:
Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 3 or 4
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Pedricktown Series

Drainage class: Very poorly drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Alluvial flats, depressions, and flood plains
Parent material: Loamy and sandy fluviomarine deposits
Slope range: 0 to 2 percent

Taxonomic class: Coarse-loamy, mixed, active, acid, mesic Humaqueptic Fluvaquents

Typical Pedon

Pedricktown silt loam, in an area of Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded, in Salem County, New Jersey; near Cohansey, 400 feet north of the intersection of Cobbs Mill Road and Cool Run Road and 300 feet east of Cobbs Mill Road, in a wooded area; USGS Alloway topographic quadrangle; lat. 39 degrees 33 minutes 00 seconds N. and long. 75 degrees 18 minutes 37 seconds W.

Oe—0 to 2 inches; very dark gray (10YR 3/1) mucky peat; very strongly acid; abrupt smooth boundary.
Ag—2 to 9 inches; black (N 2/0) silt loam; weak medium subangular structure parting to weak fine granular; friable; nonsticky, slightly plastic; strongly acid; clear smooth boundary.
Cg1—9 to 22 inches; dark gray (10YR 4/1) sandy loam; massive; friable; nonsticky, nonplastic; strongly acid; clear smooth boundary.
Cg2—22 to 36 inches; gray (2.5YR 5/1) loamy sand; single grain; loose; nonsticky, nonplastic; many coarse distinct strong brown (7.5YR 5/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; strongly acid; clear smooth boundary.
Cg3—36 to 40 inches; dark gray (5Y 4/1) sandy clay loam; massive; firm; slightly sticky, nonplastic; many medium prominent strong brown (10YR 4/6) iron

concentrations as pore linings, 1.0 to 1.5 inches in length and 0.25 inch in diameter; strongly acid; clear smooth boundary.

Cg4—40 to 49 inches; dark gray (5Y 4/1) sandy loam; massive; friable; nonsticky, nonplastic; common medium prominent strong brown (7.5YR 5/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; strongly acid; clear smooth boundary.

Cg5—49 to 56 inches; greenish gray (5GY 5/1) loamy sand; single grain; loose; nonsticky, nonplastic; many coarse distinct strong brown (7.5YR 5/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; strongly acid; clear smooth boundary.

Cg6—56 to 72 inches; gray (2.5Y 5/1) sand; single grain; loose; nonsticky, nonplastic; many coarse distinct strong brown (7.5YR 5/6) masses that have accumulations of iron and manganese oxide with clear boundaries throughout; strongly acid; clear smooth boundary.

Range in Characteristics

Depth to bedrock: More than 72 inches
Seasonal high water table: Within a depth of 6 inches
Content of rock fragments: 0 to 5 percent, by volume, in the O horizon and 0 to 10 percent, by volume, in the A and C horizons; mainly rounded quartzite gravel
Reaction: Unless limed, very strongly acid to slightly acid throughout

Oe horizon:
Color—hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2
Type of organic soil material—mucky peat

A horizon:
Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2 or is neutral with value of 2 or 3
Texture—silt loam
Redoximorphic features (if they occur)—iron depletions in shades of white or gray and masses with accumulated iron and manganese oxide in shades of yellow or brown

Cg horizon:
Color—hue of 10YR, 2.5Y, or 5Y, value of 4 to 6, and chroma of 1 or 2 or is neutral with value of 4 to 6
Texture—sandy loam, loamy sand, sand, sandy clay loam, or loam
Redoximorphic features—iron depletions in shades of white or gray and masses with accumulated iron and manganese oxide in shades of yellow or brown

Quakerbridge Series

Drainage class: Somewhat excessively drained
Permeability: Rapid
Landscape: Coastal plain
Landform: Flats and knolls
Parent material: Sandy fluviomarine deposits
Slope range: 0 to 5 percent

Taxonomic class: Mesic, coated Spodic Quartzipsamments

Typical Pedon

Quakerbridge sand, in an area of Lakewood-Quakerbridge complex, 0 to 5 percent slopes, in Gloucester County, New Jersey; in the Winslow Wildlife Refuge, about 1.9 miles southeast of the intersection of Whitehouse Road and U.S. Highway 322, on

U.S. Highway 322, about 0.75 mile northeast on Cecil Road (dirt), left at a fork in the dirt road, 0.3 mile on the left fork, and 100 feet to the right of the road, in a wooded area; USGS Williamstown topographic quadrangle; lat. 39 degrees 38 minutes 03 seconds N. and long. 74 degrees 54 minutes 32 seconds W.

Oi—0 to 2 inches; dark reddish brown (5YR 3/4), slightly decomposed plant material; extremely acid; abrupt smooth boundary.

A—2 to 3 inches; sand, 75 percent light gray (10YR 7/1) and 25 percent dark gray (10YR 4/1); single grain; loose; many fine roots; very strongly acid; abrupt smooth boundary.

E—3 to 20 inches; gray (10YR 6/1) sand; single grain; loose; many very fine and fine and few medium and coarse roots; few quartzite pebbles; very strongly acid; abrupt irregular boundary.

Bh—20 to 24 inches; brown (7.5YR 4/4) loamy sand; single grain; loose; 5 percent very weakly cemented ironstone nodules up to 2 inches in diameter; very strongly acid; clear irregular boundary.

BC—24 to 42 inches; yellowish brown (10YR 5/6) sand; single grain; loose; few very weakly cemented ironstone nodules; few discontinuous very faint clay bridges between sand grains; very strongly acid; gradual smooth boundary.

C1—42 to 46 inches; yellowish brown (10YR 5/6) sand; single grain; loose; few very weakly cemented ironstone nodules; few medium distinct light brownish gray (10YR 6/2) iron depletions and few medium distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide; very strongly acid; gradual smooth boundary.

C2—46 to 80 inches; yellowish brown (10YR 5/4) sand; single grain; loose; few very weakly cemented ironstone nodules; common medium distinct light brownish gray (10YR 6/2) iron depletions and common coarse distinct strong brown (7.5YR 5/6) masses with accumulated iron and manganese oxide; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 42 to 72 inches
Depth to the Bh horizon: 10 to 30 inches
Content of rock fragments: 0 to 5 percent, by volume, in the O, A, E, and BC horizons and 0 to 20 percent in the C horizon; mainly rounded quartzite gravel
Reaction: Unless limed, extremely acid or very strongly acid throughout

Oi horizon:
Color—hue of 5YR, value 3 or 4, and chroma of 3 or 4
Type of organic soil material—slightly decomposed plant material

A or Ap horizon (if it occurs):
Color—hue of 7.5YR to 2.5Y, value of 2 to 7, and chroma of 1 or 2
Texture of the fine-earth fraction—sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture of the fine-earth fraction—sand or fine sand

Bh horizon:
Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 to 6; the redder hue and lower value and chroma restricted to discontinuous, thin subhorizons in the uppermost part of the horizon
Texture—loamy sand, sand, or fine sand

BC horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6

Texture of the fine-earth fraction—sand, loamy sand, or fine sand

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 6
Texture of the fine-earth fraction—sand, loamy sand, or fine sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive; these features may be few, fine, and faint, making them difficult to see, especially during dry periods

Cg horizon (if it occurs):
Color—hue of 7.5YR to 5Y, value of 5 to 7, and chroma of 1 or 2
Texture of the fine-earth fraction—sand or loamy sand
Redoximorphic features—iron depletions in shades of olive or gray and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive below a depth of 42 inches

Sassafras Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats, knolls, and hills
Parent material: Loamy or gravelly fluviomarine deposits, or both (fig. 16)
Slope range: 0 to 40 percent

Taxonomic class: Fine-loamy, siliceous, semiactive, mesic Typic Hapludults

Typical Pedon

Sassafras sandy loam, in an area of Sassafras sandy loam, 0 to 2 percent slopes, in Cumberland County, New Jersey; 200 feet west of the intersection of Cubby Hollow Road and Trench Road (County Highway 699) and 100 feet north of Trench Road, in an idle field; USGS Shilo topographic quadrangle; lat. 39 degrees 24 minutes 56 seconds N. and long. 75 degrees 15 minutes 03 seconds W.

Ap—0 to 12 inches; dark yellowish brown (10YR 4/4) sandy loam; weak medium subangular blocky structure; friable; nonsticky, nonplastic; common fine roots; 5 percent quartzite gravel; slightly acid; abrupt smooth boundary.
Bt1—12 to 18 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; common fine roots; 5 percent quartzite gravel; slightly acid; clear wavy boundary.
Bt2—18 to 28 inches; strong brown (7.5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; firm; moderately sticky, moderately plastic; clay bridges between sand grains; common fine roots; 5 percent quartzite gravel; slightly acid; clear wavy boundary.
BC—28 to 40 inches; strong brown (7.5YR 5/6) loamy sand; weak fine and medium subangular blocky structure; very friable; nonsticky, nonplastic; few fine roots; 5 percent quartzite gravel; moderately acid; abrupt smooth boundary.
C1—40 to 58 inches; brownish yellow (10YR 6/6) sand; single grain; loose; nonsticky, nonplastic; very strongly acid; clear smooth boundary.
C2—58 to 80 inches; brownish yellow (10YR 6/6) sand; common medium distinct strong brown (7.5YR 5/6) and pale brown (10YR 6/3) irregularly shaped mottles throughout; single grain; loose; nonsticky, nonplastic; 5 percent quartzite gravel; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: Typically, 0 to 14 percent, by volume, in the A horizon, 0 to 20 percent in the B horizon, and 0 to 30 percent in the in the C horizon; mainly rounded quartzite gravel; up to 20 percent throughout the profile in a few pedons
Reaction: Unless limed, extremely acid to strongly acid throughout the profile
Other features: Pedons with a microsequence of Oe, A, E, and Bh horizons that have a total thickness of 4 to 6 inches in some uncultivated areas

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

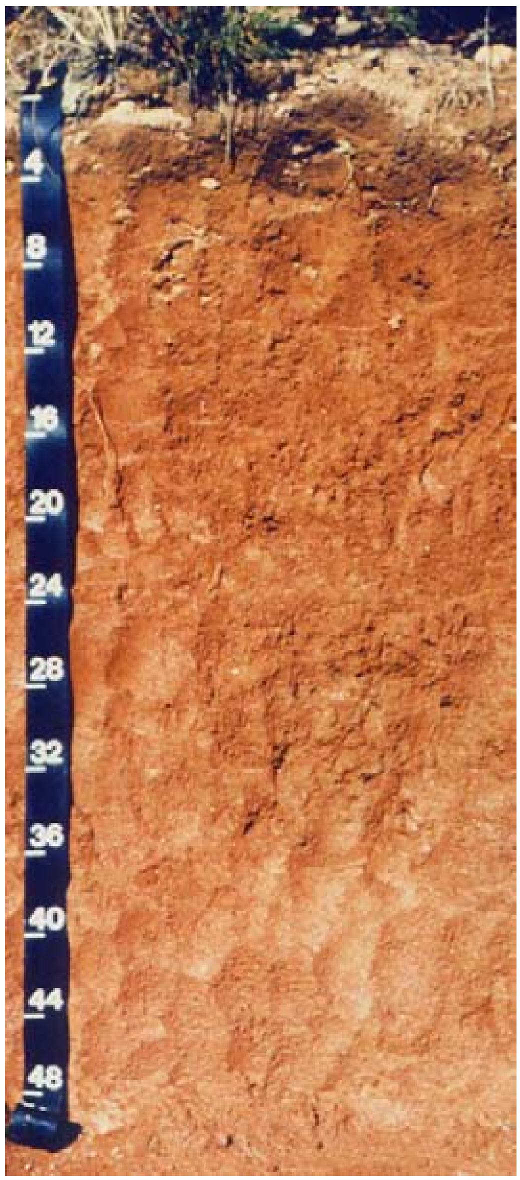

Figure 16.—A profile of a Sassafras soil. Sassafras soils formed in loamy or gravelly fluviomarine sediments, or both.

Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 5, and chroma of 1 to 4
Texture—sandy loam, loamy sand, or sandy clay loam

Bt horizon:
Color—5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—sandy loam or sandy clay loam

BC horizon (if it occurs):
Color—7.5YR to 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture of the fine-earth fraction—loamy sand or sandy loam

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 3 to 8 or variegated in shades of these colors
Texture of the fine-earth fraction—sandy loam, loamy sand, or sand

Tinton Series

Drainage class: Well drained
Permeability: Moderately rapid and rapid
Landscape: Coastal plain
Landform: Knolls and hills
Parent material: Sandy eolian deposits over glauconite-bearing fluviomarine deposits
Slope range: 0 to 5 percent

Taxonomic class: Loamy, mixed, semiactive, mesic Arenic Hapludults

Typical Pedon

Tinton sand, in an area of Tinton sand, 0 to 5 percent slopes, in Burlington County, New Jersey; about 0.7 mile west of the intersection of Madison Avenue and State Highway 38, on State Highway 38, and 0.15 mile south of State Highway 38, in an idle field; USGS Mount Holly topographic quadrangle; lat. 40 degrees 06 minutes 50 seconds N. and long. 74 degrees 48 minutes 56 seconds W.

Ap—0 to 12 inches; grayish brown (10YR 5/2) sand; weak fine granular structure; very friable; 1 percent glauconite pellets; slightly acid; abrupt smooth boundary.
E—12 to 26 inches; olive yellow (2.5Y 6/6) fine sand; single grain; loose; 1 percent glauconite pellets; few fine flakes of mica; very strongly acid; gradual wavy boundary.
Bt—26 to 38 inches; olive brown (2.5Y 4/4) fine sandy loam; weak medium and coarse subangular blocky structure; friable; slightly sticky, nonplastic; common faint clay bridges between sand grains; 10 percent glauconite pellets; few fine flakes of mica; very strongly acid; clear wavy boundary.
C1—38 to 50 inches; light olive brown (2.5Y 5/6) sand; single grain; loose; 5 percent glauconite pellets; few fine flakes of mica; very strongly acid; gradual smooth boundary.
C2—50 to 80 inches; light olive brown (2.5Y 5/4) fine sandy loam; massive; friable; 5 percent glauconite pellets; few fine flakes of mica; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 5 percent, by volume, in the A and B horizons and 0 to 20 percent in the lower part of the C horizon; mainly rounded quartzite gravel

Reaction: Unless limed, extremely acid to slightly acid
Thickness of the sandy epipedon: 20 to 36 inches
Content of glauconite pellets: 0 to 2 percent in the A and E horizons and 2 to 20 percent throughout the rest of the profile
Content of mica: 0 to 20 percent, by volume, throughout

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue 10YR or 2.5Y, value of 4 or 5, and chroma of 1 to 4
Texture—sand or fine sand

E horizon:
Color—10YR to 2.5Y, value of 5 to 8, and chroma of 4 to 8
Texture—sand, fine sand, or loamy sand

Bt horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—fine sandy loam, sandy loam, or sandy clay loam

C horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture of the fine-earth fraction—sand, loamy sand, or stratified sand and fine sandy loam

Udorthents

Landscape: Coastal plain
Permeability: Slow to moderately rapid
Landform: In most areas, the natural landforms have been greatly altered by the addition or removal of earthy materials.
Parent material: Dredged fill or excavated borrow materials derived from river channels, pits, or previously unaltered soils
Slope range: 0 to 8 percent

Taxonomic class: Udorthents

Typical Pedon

Udorthents are in areas where the natural soil properties and qualities have been greatly altered by excavation, extensive grading, or filling. Because of variable soil properties, a typical pedon and sequence, depth, and composition of the layers of this soil cannot be given. Excavated or fill areas are mainly where earthy materials have been removed or pumped from river channels for use as foundation materials for roads or buildings, general urban development, or landfills.

Range in Characteristics

Because soil properties vary so much, a typical range in characteristics cannot be given.

Westphalia Series

Drainage class: Well drained
Permeability: Moderate to rapid
Landscape: Coastal plain

Landform: Knolls and hills
Parent material: Loamy eolian deposits or loamy fluviomarine deposits
Slope range: 0 to 40 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, mesic Inceptic Hapludults

Typical Pedon

Westphalia fine sandy loam, in an area of Westphalia fine sandy loam, 2 to 5 percent slopes, in an idle field in Gloucester County, New Jersey; about 1.8 miles northwest of the intersection of State Highway 77 and State Road 538, on State Road 538, and 1,000 feet northeast of State Road 538; USGS Pitman West topographic quadrangle; lat. 39 degrees 41 minutes 56 seconds N. and long. 75 degrees 13 minutes 27 seconds W.

Ap—0 to 6 inches; dark yellowish brown (10YR 4/6) fine sandy loam; weak fine granular structure; very friable; loose; many roots; strongly acid; clear smooth boundary.
Bt—6 to 15 inches; yellowish brown (10YR 5/6) fine sandy loam; weak fine subangular blocky structure; very friable; slightly sticky; common roots; common continuous distinct clay bridges between sand grains; strongly acid; gradual smooth boundary.
BC—15 to 30 inches; brownish yellow (10YR 6/6) loamy fine sand; weak fine granular structure; very friable; few roots; very strongly acid; clear smooth boundary.
C1—30 to 48 inches; pale yellow (2.5Y 7/4) and light yellowish brown (2.5Y 6/4) fine sand; single grain; loose; very strongly acid; clear smooth boundary.
C2—48 to 80 inches; pale yellow (2.5Y 8/3) and light yellowish brown (2.5Y 6/4) stratified fine sand and loamy fine sand; single grain; loose; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: More than 72 inches
Content of rock fragments: 0 to 5 percent, by volume, throughout; mostly rounded quartzite gravel
Reaction: Unless limed, extremely acid to slightly acid

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 or 3
Texture—fine sandy loam or loamy fine sand

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 6 to 8
Texture—fine sandy loam or very fine sandy loam
Additional features—illuvial clay occurs as clay films in and around pores, on the upper surfaces of the peds, and as clay bridges between sand grains

BC horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 6 to 8
Texture—fine sandy loam or loamy fine sand

C horizon:
Color—typically, hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 8; variegated and streaked in some pedons
Texture—fine sand, loamy fine sand, loamy very fine sand, or stratified fine sand and loamy fine sand

Woodstown Series

Drainage class: Moderately well drained
Permeability: Moderate to rapid
Landscape: Coastal plain
Landform: Flats, depressions, knolls, and drainageways
Parent material: Loamy fluviomarine deposits (fig. 17)
Slope range: 0 to 5 percent

Taxonomic class: Fine-loamy, mixed, active, mesic Aquic Hapludults

Typical Pedon

Woodstown sandy loam, in an area of Woodstown sandy loam, 0 to 2 percent slopes, in Cumberland County, New Jersey; 1 mile north of the intersection of East Point Road and Dorchester-Heislerville Road, on the east side of the road, in an idle field;

Figure 17.—A profile of Woodstown soil. Standing water is at a depth of about 48 inches in this profile. Woodstown soils formed in loamy fluviomarine deposits. They have a seasonal high water table at a depth of 18 to 42 inches.

USGS Heislerville topographic quadrangle; lat. 39 degrees 13 minutes 20 seconds N. and long. 74 degrees 59 minutes 23 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) sandy loam; weak fine granular structure; very friable; slightly sticky, slightly plastic; slightly acid; abrupt smooth boundary.

Bt1—8 to 26 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; faint discontinuous clay films and clay bridges between sand grains; few fine pale brown (10YR 6/3) irregularly shaped masses that have accumulations of iron and manganese oxide with diffuse boundaries throughout; slightly acid; clear wavy boundary.

Bt2—26 to 30 inches; light yellowish brown (10YR 6/4) sandy clay loam; weak medium subangular blocky structure; friable; moderately sticky, moderately plastic; distinct clay films and clay bridges between sand grains; common to many, fine to medium, faint to distinct yellowish brown (10YR 5/6) irregularly shaped masses with accumulated iron and manganese oxide and light gray (10YR 7/2) irregularly shaped iron depletions with diffuse to clear boundaries throughout; moderately acid; clear wavy boundary.

Bt3—30 to 36 inches; light yellowish brown (10YR 6/4) sandy loam; weak medium subangular blocky structure; friable; slightly sticky, slightly plastic; clay films and clay bridges between sand grains; common fine faint yellowish brown (10YR 5/6) irregularly shaped masses that have accumulations of iron and manganese oxide with diffuse boundaries and distinct light gray (10YR 7/2) irregularly shaped iron depletions with clear boundaries throughout; moderately acid; clear smooth boundary.

C—36 to 80 inches; very pale brown (10YR 7/4), strong brown (7.5YR 5/6), and light gray (10YR 7/2) loamy sand; single grain; loose; nonsticky, nonplastic; strongly acid.

Range in Characteristics

Depth to bedrock: More than 80 inches
Depth to the seasonal high water table: 18 to 42 inches
Content of rock fragments: 0 to 14 percent, by volume, in the A, E, and B horizons and 0 to 20 in the C horizon; mostly quartzite gravel
Reaction: Unless limed, extremely acid to strongly acid
Other features: Pedons with a microsequence of Oe, A, E, and Bh horizons having a total thickness of 5 to 7 inches in some uncultivated areas

O horizon (if it occurs):
Type of organic soil material—slightly decomposed or moderately decomposed plant material

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 or 6, and chroma of 1 to 4
Texture—sandy loam

Bt horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy clay loam or sandy loam
Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

C horizon:
Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 3 to 8
Texture of the fine-earth fraction—sand or loamy sand

Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Cg horizon (if it occurs):

Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 1 or 2 or is neutral with value of 4 to 8

Texture of the fine-earth fraction—sand or loamy sand

Redoximorphic features—iron depletions in shades of olive, gray, or white and masses with accumulated iron and manganese oxide in shades of red, brown, yellow, or olive

Formation of the Soils

This section describes the factors of soil formation and the processes of horizon differentiation and relates them to the soils in the survey area.

Factors of Soil Formation

The soils in Gloucester County formed by processes of the environment acting upon geologic agents, such as marine sediments, fluviomarine sediments, and alluvial sediments. The characteristics of a soil are determined by the combined influence of parent material, climate, plant and animal life, landform position, and time. These five factors are responsible for the profile development and chemical properties that differentiate soils. Figures 18, 19, and 20 illustrate some of the variations in the relationship between soils, parent material, and landform position that occur in Gloucester County, and table 24 shows the relationship of soils to soil characteristics, major landforms, and drainage.

Parent Material

Parent material is the unconsolidated mass in which a soil forms. In Gloucester County, it is a major factor in determining what kind of soil forms and can be correlated to some degree to geologic formations.

Parent material is largely responsible for the chemical and mineralogical composition of soils and for the major differences among the soils of the county. Major differences in parent material, such as differences in texture and soil color, can be observed in the field. Less distinct differences, such as differences in mineralogical composition, can be determined only by careful laboratory analysis.

Nearly all of the soils of Gloucester County formed in marine sediments, fluviomarine deposits, alluvial deposits, or organic deposits or in a combination of these parent materials. Although the glaciers did not reach as far south as Gloucester County, meltwater from the glaciers and alluvium from ancient rivers probably covered most of the county and mixed the materials of the older marine deposits. Rounded quartzite gravel, believed to be of Pleistocene age and older, can be found in all parts of the county, including areas at the highest elevations. In extensive areas this gravel is not abundant, but it is locally present in significant amounts.

During the Pleistocene period, the climate of Gloucester County was much colder than it is now and the sea level fluctuated greatly. When the water level was low, much erosion by wind and water reworked the original soil deposits. Except for this mixing, the soils of the county are closely related to the parent material from which they formed.

Climate

Climate, particularly precipitation and temperature, affects the physical, chemical, and biological relationships in the soil. It influences the rate at which the sediments

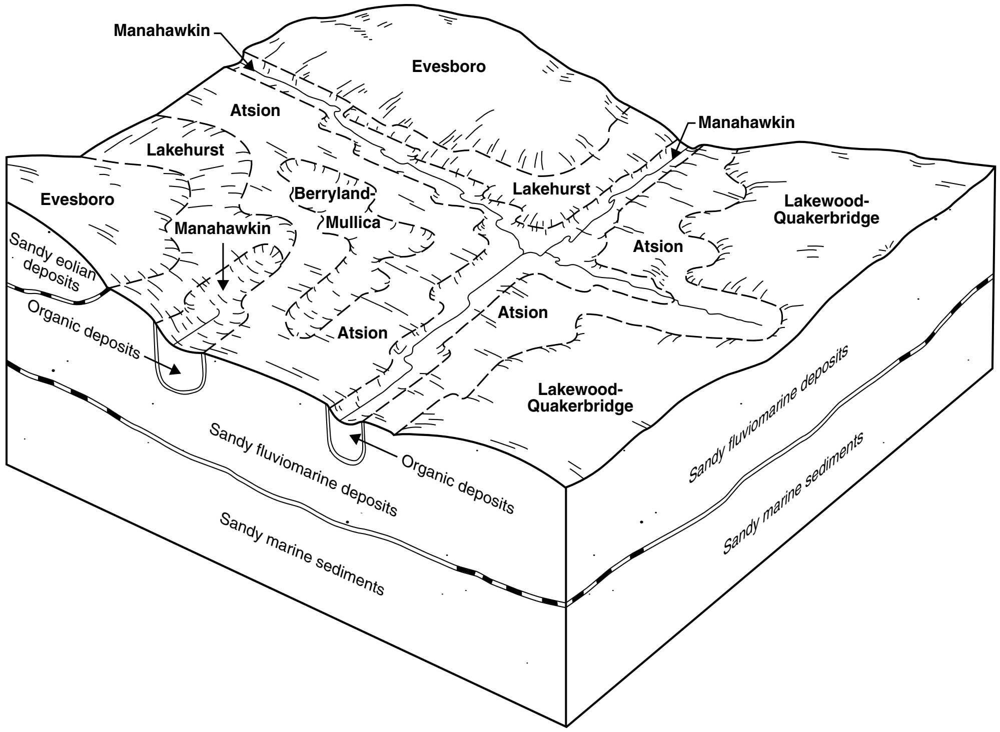

Figure 18.—Typical relationship of the soils, landform position, and parent material of soils formed in sandy materials. The excessively drained Evesboro, Lakewood, and Quakerbridge soils are in the higher landform positions. The very poorly drained Berryland, Mullica, and Manahawkin soils are in the lowest landform positions.

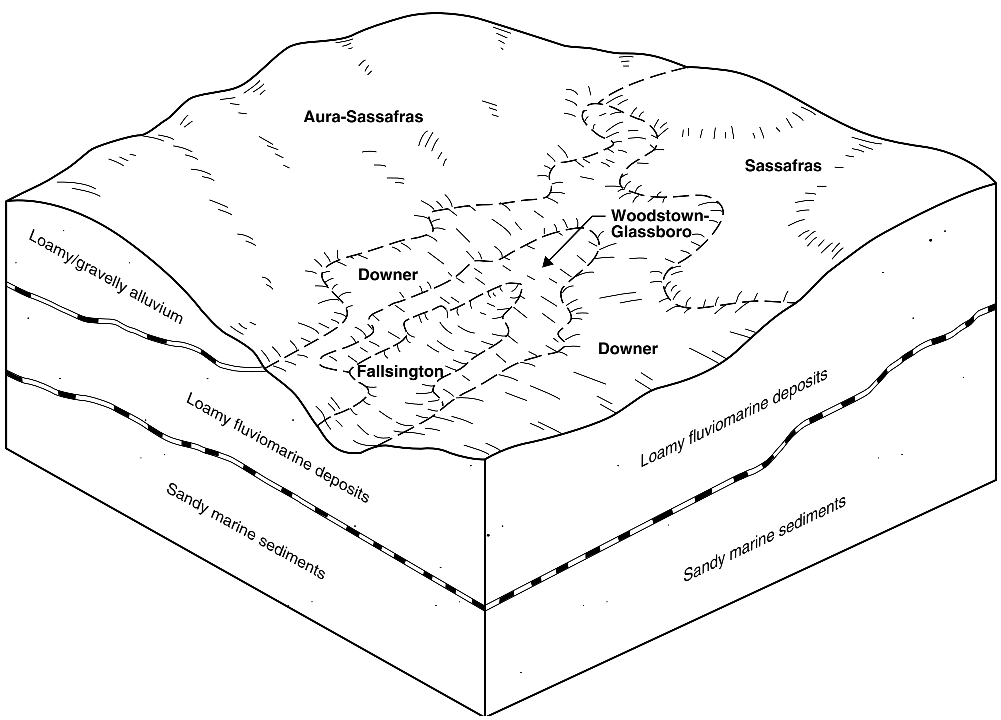

Figure 19.—Typical relationship of the soils, landform position, and parent material of soils formed in loamy materials. The well drained Aura, Sassafras, and Downer soils are in the higher landform positions. The poorly drained Fallsington soils are in the lowest landform positions in depressions or drainageways.

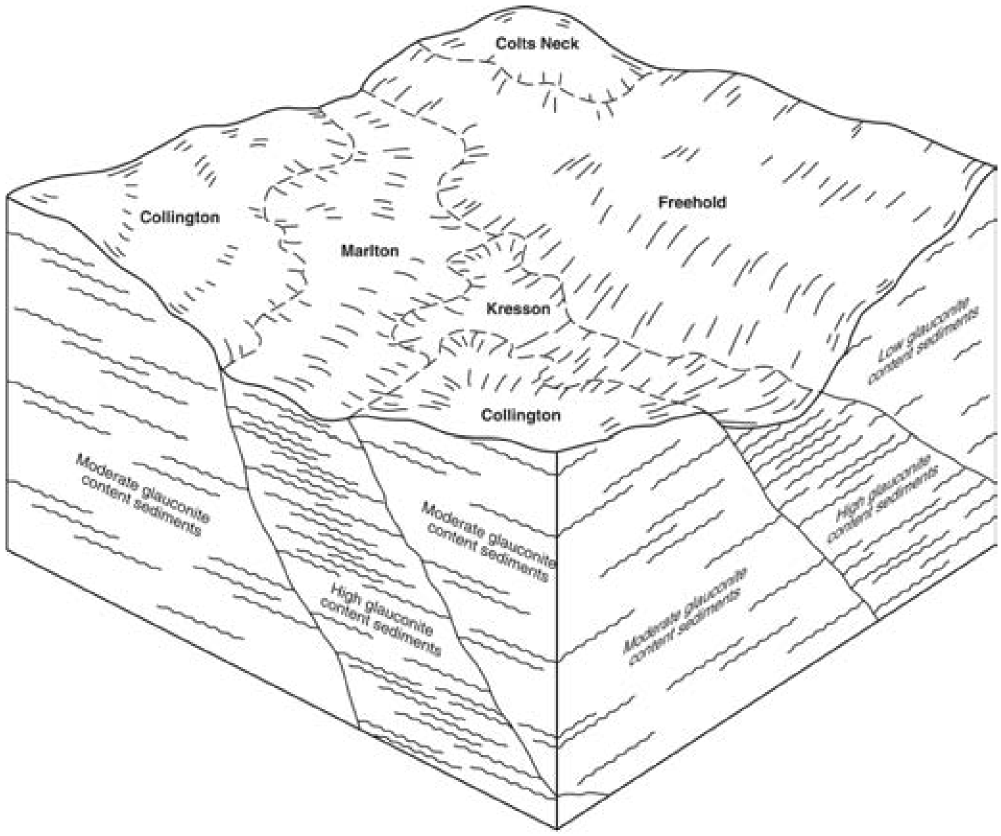

Figure 20.—Typical relationship of the soils, landform position, and parent material of soils formed in glauconite-bearing materials. The well drained Freehold, Collington, and Colts Neck soils are in the higher landform positions and formed in loamy materials with a moderate or low content of glauconite. The moderately well drained Marlton and somewhat poorly drained Kresson soils are in the lower landform positions and formed in clayey materials with a high content of glauconite.

and deposits weather and organic matter decomposes. The amount of leaching in a soil is related to the amount of rainfall and the movement of water through the soil. The effects of climate also control the kinds of plants and animals living in and on the soil. Temperature influences the kind and growth of organisms and the speed of chemical and physical reactions in the soil.

Gloucester County has a warm, humid climate. It is in a part of the coastal plain in New Jersey where elevation ranges about 0 to 180 feet. The climate favors rapid chemical processes, which result in the decomposition of organic matter and the weathering of sediments and deposits. The effects of climate are reflected in the soils of the county. Mild temperatures throughout the year and abundant rainfall have resulted in the depletion of organic matter and considerable leaching of soluble bases. Because variations in the climate of the county are small, climate has probably not caused major local differences among soils. It has mainly affected the formation of soils in the county by altering the parent material through changes in temperature and in the amount of precipitation and through influences on plant and animal life.

Climatic changes were most dramatic during and after the ice age. Meltwater and the formation of rivers from glaciers to the north were responsible for the mixing of the soil materials in Gloucester County. High winds during this period were probably responsible for some sand deposits in the Evesboro soils.

During the time that the soils were forming and being mixed by glacial meltwater, water covered many low areas of the county. Soils in these water-covered areas

developed a thick accumulation of organic matter, which is apparent in the dark, organic-rich surface layer of soils, such as in the Manahawkin series. Gray colors in the subsoil indicate that iron oxides could not form in soils that developed in water-covered areas. Other soils that formed in the higher positions on the landscape generally were well drained, developed a less organic-rich surface layer, and had iron oxides that freely formed brighter colors.

Plant and Animal Life

Plants and animals influence the formation and differentiation of soil horizons. The type and number of organisms in and on the soil are determined in part by climate and in part by the nature of the soil material, the landform position, and the age of the soil. Bacteria, fungi, and other micro-organisms aid in the weathering of sediments and deposits and in the decomposition of organic matter. The plants and animals living in an area are the primary sources of organic material for the soils in that area.

Plants largely determine the kinds and amounts of organic matter that are added to a soil under normal conditions and the way in which the organic matter is added. They also are important for the changes of base status and for the leaching process of a soil.

Animals convert complex compounds into simpler forms, add organic matter to the soil, and modify certain chemical and physical properties of soil. In Gloucester County most of the organic material accumulates on the soil surface. It is acted upon by micro-organisms, fungi, insects, earthworms, and other forms of life and by direct chemical reaction. It is mixed with the uppermost mineral part of the soil by the activities of earthworms and other small invertebrates.

Under the native forest of this county, not enough bases are brought to the surface by plants to counteract the effects of leaching. Generally, the soils of the county developed under a hardwood or pine forest. Trees took up elements from the subsoil and added organic matter to the soil by depositing leaves, roots, twigs, and other plant remains on the surface. The material deposited on the surface was acted upon by organisms and underwent chemical reaction.

In the better drained landform positions, organic matter decomposes at a moderate rate because of the moderate temperature and moisture supply and the high acidity level. Soils that have little accumulation of organic matter include those in the Downer, Sassafras, Westphalia, and Aura series. In the wetter landform positions, organic matter decomposes more slowly and accumulates in the soils to a greater degree. Examples are the Berryland, Mullica, Fallsington, and Manahawkin soils. Other examples are the very frequently flooded Mannington and Nanticoke soils on tidal flats.

Landform Position

Landform position causes many differences in drainage, surface runoff, soil temperature, and extent of geologic erosion. In Gloucester County it is largely determined by the kind of underlying sediments or deposits, or both, and the extent that the landscape is dissected by streams.

Landform position affects the percolation of water through the profile. Water movement through the profile is important in soil development because it aids chemical reactions and is necessary for leaching.

Landform position affects drainage to a great degree in Gloucester County. The seasonal high water table generally is higher in level, nearly level, and gently sloping areas. Hammonton, Woodstown, and Buddtown soils, which are on flats, in depressions, or in drainageways, are moderately well drained because they are nearly level or gently sloping and receive runoff and seepage from the higher, adjacent areas.

Soils at the lower elevations are less sloping and receive runoff from the higher, adjacent areas. This runoff tends to accumulate in the nearly level or slightly concave areas. The somewhat poorly drained Deptford, Kresson, and Glassboro soils and the poorly drained and very poorly drained Berryland, Mullica, Jade Run, Fallsington, Colemantown, and Lenni soils are in these areas.

Time

The length of time that soil material has been exposed to the soil-forming processes accounts for some differences between soils. The formation of a well defined profile, however, also depends on other factors. Less time is required for a profile to develop in coarse textured material than in similar but finer textured material, even if the environment is the same for both materials. Less time is required for a profile to develop in an area that is warm and humid and has a dense plant cover, such as Gloucester County, than in a cold, dry area that has a sparse plant cover.

Soils vary considerably in age. The length of time that a soil has been forming is generally reflected in the profile. Old soils generally have better defined horizons than young soils. In Gloucester County, the effects of time as a soil-forming factor are more apparent in the older soils that are on the higher hills and knolls. Examples are Aura, Sassafras, Marlton, and Keyport soils. These soils have well defined horizons. In contrast, young soils, such as those in the Evesboro series and Fluvaquents, formed in more recent windblown sediments or alluvium on flood plains and have not been in place long enough to develop as completely as Aura, Sassafras, Marlton, and Keyport soils.

Processes of Horizon Differentiation

One or more soil-forming processes are involved in the formation of soil horizons. These processes are the accumulation of organic matter; the leaching of carbonates and other soluble material; the chemical weathering, mainly by hydrolysis, of primary minerals into silicate clay minerals; the translocation of silicate clay and some silt-sized particles from one horizon to another; and the reduction and transfer of iron.

These processes have been active in the formation of most of the soils in Gloucester County. The interaction of the first four processes is indicated by the strongly expressed horizons in the Aura and Sassafras soils. All five processes have been active in the formation of the poorly drained Lenni and moderately well drained Woodstown soils, where iron transformation is evident as shown by the grayish colors, which are due to iron reduction, and the yellowish or reddish colors, which are due to iron oxidation.

Some organic matter has accumulated in all of the soils in the survey area. Most of the soils have a low or moderate content of organic matter in the surface layer. The content of organic matter ranges from low, as in the excessively drained Evesboro soils, to high, as in the very poorly drained Manahawkin, Mannington, and Nanticoke soils.

The translocation of clay minerals is an important process in the development of many soils in the survey area. As clay minerals are removed from the A horizon, they accumulate initially as clay films on the faces of peds, in pores, and in root channels in the B horizon.

As silicate clay forms from primary minerals, some iron is commonly released as hydrated oxides. These oxides are generally red, and even if they occur in small amounts, they give the soil material a brownish color. They are largely responsible for the strong brown, yellowish brown, or reddish brown colors that are dominant in the subsoil of many soils in the survey area. In other soils, such as those in the Marlton,

Freehold, and Collington series, the subsoil tends to be more olive or greenish because the parent material contains significant amounts of greenish glauconite, which often dominates the color of a developing subsoil.

The reduction and transfer of iron have occurred in all of the soils that are not characterized by good drainage. Soil features associated with chemically reduced iron are referred to as redoximorphic features. In poorly drained and very poorly drained soils, seasonal saturation from water occurs for long periods at or near the soil surface. In soils such as those in the Lenni, Fallsington, Mullica, and Jade Run series, the redoximorphic features are evidenced by reddish masses of reoxidized iron occurring in an essentially gray matrix in the subsoil.

In somewhat poorly drained and moderately well drained soils, seasonal saturation from water occurs for shorter periods and at deeper depths below the soil surface. In soils such as those in the Woodstown, Hammonton, and Glassboro series, the redoximorphic features are evidenced by gray iron or clay depletions and reddish masses of reoxidized iron occurring in an essentially yellow or brown matrix.

In some soils with seasonal saturation, redoximorphic features do not form or are not strongly evident to the observer. The iron in very sandy soils often will not reduce or reoxidize because the ground water contains high oxygen levels, which prevent iron reduction and the formation of strong redoximorphic features. Sandy soils, such as those in the Lakehurst and Quakerbridge series, have zones of seasonal saturation where redoximorphic features are not always evident by visual examination. In soils that developed from greenish glauconite-influenced parent materials, such as those in the Marlton and Kresson series, redoximorphic features often cannot be distinguished because the greenish glauconite color dominates the zone of saturation, making visual identification of redoximorphic features difficult.

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Glossary

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction in which a slope faces.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliquivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of ironstone as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

Clayey. A general texture term that includes sandy clay, silty clay, or clay.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Coarse textured soil. Sand or loamy sand.

Clay spot. A spot where the texture is silty clay or clay in areas where the texture is typically loamy. Typically, 1/4 acre to 2 acres.

Coarse-loamy. According to the family criteria in the soil taxonomic system, soil containing less than 18 percent, by weight, clay and 15 percent or more fine sand or coarser material.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

COLE (coefficient of linear extensibility). See Linear extensibility.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when

subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Depression. A portion of land surrounded on all sides by higher land. These areas generally do not have outlets for drainage.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Eroded (soil phase). Because of erosion, the soil has lost an average of 25 to 75 percent of the original A horizon or the uppermost 2 to 6 inches if the original A horizon was less than 8 inches thick.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field border. A strip of perennial vegetation (trees, shrubs, or herbaceous plants) established on the edge of a field to control erosion, provide travel lanes for farm machinery, control competition from adjacent woodland, or provide food and cover for wildlife.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Fine-loamy. According to the family criteria in the soil taxonomic system, soil containing 18 to 35 percent, by weight, clay and 15 percent or more fine sand or coarser material.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flat. A general term for a level or nearly level surface or small area of land marked by little or no relief.

Flooding. The temporary covering of the soil surface by flowing water from any source, such as overflowing streams, runoff from adjacent or surrounding slopes, and inflow from high tides. The frequency of flooding generally is expressed as none, rare, occasional, frequent, or very frequent.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Fluviomarine deposits. Marine deposits that have been reworked and transported from their original place by river or stream action.

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glauconite. A greenish mineral closely related to micas and essentially a hydrous potassium iron silicate. It is a locally important mineral in certain coastal plain marine sediments and is locally referred to as “greensand” or “marl.” It commonly occurs in soils as sand-sized “pellets.” New Jersey glauconite classes are based on percent glauconite, by volume, either in the mineralogy control section or in the upper part of the B horizon. The classes are as follows:

Very low	0 to 2 percent
Low	2 to 10 percent
Moderate	10 to 20 percent
High	20 to 40 percent
Very high	more than 40 percent

Glauconitic. Refers to soil or parent materials that contain glauconite.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Gravelly spot. An area of soils where the content of rock fragments generally less than 3 inches in diameter is more than 15 percent, by volume, in the surface layer, occurring in a map unit in which the surface layer of the dominant soil or soils has less than 15 percent gravel. Typically, 1/4 acre to 5 acres in size.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Gravel pit. An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically, 1/4 acre to 5 acres in size.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Ironstone. A cemented material formed within a soil and composed of high amounts of precipitated iron. Ironstone forms through complex chemical processes that occur within certain soils over long periods of time. Ironstone fragments (channers) are typically flat and horizontally oriented within a soil horizon.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landfill. An area of accumulated waste products from human habitat. Landfill areas can be above or below the natural ground level.

Landform. The description of a given terrain based on position and configuration. Examples are flood plain, flat, hill, knoll, and swamp.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loamy. A general texture term that includes very coarse sandy loam, coarse sandy loam, sandy loam, fine sandy loam, very fine sandy loam, loam, sandy clay loam, or clay loam.

Low strength. The soil is not strong enough to support loads.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Native pasture. Pasture that has seeded naturally in native grasses.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

No-till farming. A method of planting crops in which there is virtually no seedbed preparation. A thin slice of the soil is opened, and the seed is planted at the desired depth.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.
Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.
Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.
Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.
Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.
Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.
Relief. The elevations or inequalities of a land surface, considered collectively.
Rill. A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.
Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
Root zone. The part of the soil that can be penetrated by plant roots.

Rotational grazing. Moving livestock from one grazing area to another to maintain optimum forage and pasture productivity.
Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.
Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.
Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
Sandy. A general texture term that includes coarse sand, sand, fine sand, very fine sand, loamy coarse sand, loamy sand, loamy fine sand, or loamy very fine sand.
Sandy spot. An area where the surface layer is sandy (loamy sand or sand) occurring in a map unit in which the dominant soil or soils have a loamy, silty, or clayey surface layer. Excluded are areas where the textural classes are adjoining, such as an area of loamy sand occurring in a map unit in which the dominant soil or soils have a surface layer of sandy loam. Typically 1/4 acre to 2 acres in size.
Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.
Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)
Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
Severely eroded spot. An area where on the average 75 percent or more of the original surface layer has been lost because of accelerated erosion. Typically, 1/4 acre to 2 acres.
Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
Silica. A combination of silicon and oxygen. The mineral form is called quartz.
Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
Silty. A general texture term that includes silt, silt loam, or silty clay loam.
Siltstone. Sedimentary rock made up of dominantly silt-sized particles.
Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
Sinkhole. A depression in the landscape where limestone has been dissolved.
Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the

steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Level	0 to 1 percent
Nearly level	0 to 2 percent
Gently sloping	2 to 5 percent
Strongly sloping	5 to 10 percent
Moderately steep	10 to 15 percent
Steep	15 to 25 percent
Very steep	25 percent and higher

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soil. A natural, three-dimensional body at the Earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Swamp. A saturated, very poorly drained area that is intermittently covered by water. Swamps are mainly covered by trees or shrubs.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth’s surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Wet spot. An area of somewhat poorly drained to very poorly drained soils that are at least two drainage classes wetter than the named soils in the surrounding map unit. Areas identified on the detailed soil maps by a special symbol typically are 0.5 acre to 2 acres in size.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1963-90 at Glassboro, New Jersey.)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have-- Maximum temperature higher than--	2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days*	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snow-fall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January--	39.0	22.5	30.7	64	-1	27	3.35	1.86	4.68	6	2.5
February-	41.6	24.2	32.9	67	5	40	2.84	1.57	3.96	5	1.3
March----	51.4	32.6	42.0	78	13	144	3.53	2.05	4.86	6	.5
April----	61.8	41.4	51.6	86	26	354	3.96	2.46	5.31	7	.0
May------	72.3	51.3	61.8	91	35	676	4.26	2.25	6.02	7	.0
June-----	81.2	60.4	70.8	96	38	918	3.71	1.57	5.53	6	.0
July-----	85.7	65.8	75.8	98	52	1,106	4.26	2.08	6.14	6	.0
August---	84.5	64.5	74.5	95	49	1,069	4.18	1.70	6.28	5	.0
September	77.7	57.0	67.3	94	40	819	3.58	1.75	5.17	5	.0
October--	66.4	45.0	55.7	84	27	488	3.37	1.90	4.67	4	.0
November-	55.8	37.3	46.5	76	19	225	3.60	1.64	5.27	5	.0
December-	44.1	27.8	36.0	68	8	61	3.69	1.82	5.31	6	1.5
Yearly:											
Average	63.4	44.2	53.8	---	---	---	---	---	---	---	---
Extreme	---	---	---	99	-2	---	---	---	---	---	---
Total--	---	---	---	---	---	5,927	44.33	35.85	51.15	68	5.7

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1963-90 at Glassboro, New Jersey.)

Probability	Temperature		
	24° F or lower	28° F or lower	32° F or lower
Last freezing temperature in spring:			
1 year in 10 later than	Apr. 1	Apr. 9	Apr. 25
2 years in 10 later than	Mar. 28	Apr. 5	Apr. 21
5 years in 10 later than	Mar. 19	Mar. 27	Apr. 13
First freezing temperature in fall:			
1 year in 10 earlier than	Nov. 4	Oct. 26	Oct. 8
2 years in 10 earlier than	Nov. 10	Oct. 31	Oct. 13
5 years in 10 earlier than	Nov. 22	Nov. 12	Oct. 25

Table 3.--Growing Season

(Recorded in the period 1963-90 at Glassboro, New Jersey.)

Probability	Daily minimum temperature during growing season		
	Higher than 24° F	Higher than 28° F	Higher than 32° F
	Days	Days	Days
9 years in 10	225	206	177
8 years in 10	232	214	183
5 years in 10	247	228	195
2 years in 10	261	242	207
1 year in 10	269	250	213

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AtsA	Atsion sand, 0 to 2 percent slopes	568	0.3
AtsAr	Atsion sand, 0 to 2 percent slopes, rarely flooded	4,399	2.0
AucB	Aura loamy sand, 0 to 5 percent slopes	2,607	1.2
AugA	Aura sandy loam, 0 to 2 percent slopes	255	0.1
AugB	Aura sandy loam, 2 to 5 percent slopes	18,280	8.5
AugC	Aura sandy loam, 5 to 10 percent slopes	75	*
AupB	Aura loam, 2 to 5 percent slopes	46	*
AvsB	Aura-Sassafras loamy sands, 0 to 5 percent slopes	1,166	0.5
AvsC	Aura-Sassafras loamy sands, 5 to 10 percent slopes	613	0.3
AvtB	Aura-Sassafras sandy loams, 2 to 5 percent slopes	4,742	2.2
AvtC	Aura-Sassafras sandy loams, 5 to 10 percent slopes	756	0.4
AvtC2	Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded	389	0.2
AvuB	Aura-Urban land complex, 0 to 5 percent slopes	5,800	2.7
AvuC	Aura-Urban land complex, 5 to 10 percent slopes	344	0.2
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded	34	*
BEXAS	Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded	2,171	1.0
BumA	Buddtown-Deptford complex, 0 to 2 percent slopes	1,756	0.8
BuuB	Buddtown-Urban land complex, 0 to 5 percent slopes	409	0.2
ChsAt	Chicone silt loam, 0 to 1 percent slopes, frequently flooded	165	*
CoeAs	Colemantown loam, 0 to 2 percent slopes, occasionally flooded	224	0.1
CogB	Collington loamy sand, 0 to 5 percent slopes	188	*
CogC	Collington loamy sand, 5 to 10 percent slopes	39	*
CokA	Collington sandy loam, 0 to 2 percent slopes	189	*
CokB	Collington sandy loam, 2 to 5 percent slopes	488	0.2
CokC	Collington sandy loam, 5 to 10 percent slopes	148	*
CopB	Collington-Urban land complex, 0 to 5 percent slopes	740	0.3
CosB	Colts Neck sandy loam, 2 to 5 percent slopes	931	0.4
CosC	Colts Neck sandy loam, 5 to 10 percent slopes	533	0.2
DocB	Downer loamy sand, 0 to 5 percent slopes	12,880	6.0
DocC	Downer loamy sand, 5 to 10 percent slopes	79	*
DoeA	Downer sandy loam, 0 to 2 percent slopes	6,173	2.9
DoeB	Downer sandy loam, 2 to 5 percent slopes	1,277	0.6
DouB	Downer-Urban land complex, 0 to 5 percent slopes	2,213	1.0
EveB	Evesboro sand, 0 to 5 percent slopes	866	0.4
EveC	Evesboro sand, 5 to 10 percent slopes	972	0.5
EveE	Evesboro sand, 15 to 25 percent slopes	2	*
EvuB	Evesboro-Urban land complex, 0 to 5 percent slopes	218	0.1
FamA	Fallsington sandy loam, 0 to 2 percent slopes	5,928	2.8
FapA	Fallsington loam, 0 to 2 percent slopes	1,718	0.8
FauB	Fallsington-Urban land complex, 0 to 5 percent slopes	1,066	0.5
FmhAt	Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded	5,479	2.5
FrfB	Freehold loamy sand, 0 to 5 percent slopes	8,343	3.9
FrfC	Freehold loamy sand, 5 to 10 percent slopes	2,177	1.0
FrkA	Freehold sandy loam, 0 to 2 percent slopes	2,300	1.1
FrkB	Freehold sandy loam, 2 to 5 percent slopes	3,215	1.5
FrkC	Freehold sandy loam, 5 to 10 percent slopes	981	0.5
FrkD	Freehold sandy loam, 10 to 15 percent slopes	800	0.4
FrkD2	Freehold sandy loam, 10 to 15 percent slopes, eroded	147	*
FrkE	Freehold sandy loam, 15 to 25 percent slopes	1,871	0.9
FrkF	Freehold sandy loam, 25 to 40 percent slopes	661	0.3
FrrB	Freehold-Urban land complex, 0 to 5 percent slopes	5,727	2.7
FrrC	Freehold-Urban land complex, 5 to 10 percent slopes	47	*
HbmB	Hammonton loamy sand, 0 to 5 percent slopes	4,552	2.1
HbrB	Hammonton-Urban land complex, 0 to 5 percent slopes	465	0.2
JdrA	Jade Run fine sandy loam, 0 to 2 percent slopes	948	0.4
JduA	Jade Run-Urban land complex, 0 to 2 percent slopes	90	*
KemB	Keyport sandy loam, 2 to 5 percent slopes	1,638	0.8
KemC2	Keyport sandy loam, 5 to 10 percent slopes, eroded	170	*
KeoA	Keyport loam, 0 to 2 percent slopes	374	0.2
KeuB	Keyport-Urban land complex, 0 to 5 percent slopes	120	*
KreA	Kresson fine sandy loam, 0 to 2 percent slopes	50	*
LakB	Lakehurst sand, 0 to 5 percent slopes	491	0.2

See footnote at end of table.

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
LasB	Lakewood sand, 0 to 5 percent slopes	987	0.5
LatvB	Lakewood-Quakerbridge complex, 0 to 5 percent slopes	1,402	0.7
LenA	Lenni loam, 0 to 2 percent slopes	2,205	1.0
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded	11,211	5.2
MamnAv	Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded	2,064	1.0
MamuAv	Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded	2,865	1.3
MaoB	Marlton sandy loam, 2 to 5 percent slopes	2,122	1.0
MaoC	Marlton sandy loam, 5 to 10 percent slopes	395	0.2
MaoC2	Marlton sandy loam, 5 to 10 percent slopes, eroded	478	0.2
MaoD	Marlton sandy loam, 10 to 15 percent slopes	33	*
MaoD2	Marlton sandy loam, 10 to 15 percent slopes, eroded	396	0.2
MauB	Marlton-Urban land complex, 0 to 5 percent slopes	504	0.2
MumA	Mullica sandy loam, 0 to 2 percent slopes	2	*
OTKA	Othello and Fallsington soils, 0 to 2 percent slopes	1	*
PEEAR	Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded	133	*
PHG	Pits, sand and gravel	1,565	0.7
SabB	Sassafras loamy sand, 0 to 5 percent slopes	3,307	1.5
SabC	Sassafras loamy sand, 5 to 10 percent slopes	1,641	0.8
SabD	Sassafras loamy sand, 10 to 15 percent slopes	975	0.5
SabF	Sassafras loamy sand, 15 to 40 percent slopes	337	0.2
SacA	Sassafras sandy loam, 0 to 2 percent slopes	4,270	2.0
SacB	Sassafras sandy loam, 2 to 5 percent slopes	2,769	1.3
SacC	Sassafras sandy loam, 5 to 10 percent slopes	986	0.5
SacD	Sassafras sandy loam, 10 to 15 percent slopes	52	*
SapB	Sassafras-Urban land complex, 0 to 5 percent slopes	1,353	0.6
ThfB	Tinton sand, 0 to 5 percent slopes	453	0.2
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	361	0.2
UddB	Udorthents, dredged materials, 0 to 8 percent slopes	1,844	0.9
UddcB	Udorthents, dredged coarse materials, 0 to 8 percent slopes	3,539	1.6
UddfB	Udorthents, dredged fine materials, 0 to 8 percent slopes	1,271	0.6
UddrB	Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes	506	0.2
UdrB	Udorthents, refuse substratum, 0 to 8 percent slopes	244	0.1
UR	Urban land	4,343	2.0
USAURB	Urban land-Aura complex, 0 to 5 percent slopes	1,408	0.7
USDOWB	Urban land-Downer complex, 0 to 5 percent slopes	1,764	0.8
USFREB	Urban land-Freehold complex, 0 to 5 percent slopes	1,846	0.9
USSASB	Urban land-Sassafras complex, 0 to 5 percent slopes	649	0.3
USWESB	Urban land-Westphalia complex, 0 to 5 percent slopes	491	0.2
WATER	Water	10,735	5.0
WeeB	Westphalia fine sandy loam, 2 to 5 percent slopes	4,562	2.1
WeeC	Westphalia fine sandy loam, 5 to 10 percent slopes	1,100	0.5
WeeD	Westphalia fine sandy loam, 10 to 15 percent slopes	439	0.2
WeeD2	Westphalia fine sandy loam, 10 to 15 percent slopes, eroded	77	*
WeeF	Westphalia fine sandy loam, 15 to 40 percent slopes	555	0.3
WehB	Westphalia-Urban land complex, 0 to 5 percent slopes	2,037	0.9
WehC	Westphalia-Urban land complex, 5 to 10 percent slopes	497	0.2
WoeA	Woodstown sandy loam, 0 to 2 percent slopes	371	0.2
WoeB	Woodstown sandy loam, 2 to 5 percent slopes	363	0.2
WokA	Woodstown-Glassboro complex, 0 to 2 percent slopes	9,719	4.5
WooB	Woodstown-Urban land complex, 0 to 5 percent slopes	2,180	1.0
	Total	215,500	100.0

* Less than 0.1 percent.

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
AtsA:											
Atsion	5w	---	---	---	---	---	---	---	---	---	---
AtsAr:											
Atsion, rarely flooded	5w	---	---	---	---	---	---	---	---	---	---
AucB:											
Aura	2s	70.00	---	3.50	---	25.00	---	---	20.00	30.00	---
AugA:											
Aura	1	100.00	---	4.00	---	35.00	---	---	20.00	45.00	---
AugB:											
Aura	2e	100.00	---	3.50	---	35.00	---	---	20.00	45.00	---
AugC:											
Aura	3e	90.00	---	3.50	---	30.00	---	---	18.00	40.00	---
AupB:											
Aura	2e	100.00	---	4.50	---	35.00	---	---	20.00	45.00	---
AvsB:											
Aura	2s	90.00	---	3.00	---	35.00	---	---	20.00	45.00	---
Sassafras	2e	120.00	---	3.50	---	45.00	---	---	---	50.00	---
AvsC:											
Aura	3e	80.00	---	3.00	---	35.00	---	---	20.00	45.00	---
Sassafras	3e	110.00	---	3.50	---	45.00	---	---	---	50.00	---
AvtB:											
Aura	2e	100.00	---	---	---	35.00	---	---	20.00	45.00	---
Sassafras	2e	130.00	---	3.50	---	45.00	---	---	---	50.00	---
AvtC:											
Aura	3e	90.00	---	---	---	30.00	---	---	18.00	40.00	---
Sassafras	3e	120.00	170.00	3.50	---	40.00	---	---	---	45.00	65.00

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
AvtC2:											
Aura, eroded-------	3e	85.00	---	---	---	30.00	---	---	18.00	40.00	---
Sassafras, eroded--	3e	110.00	---	3.70	---	35.00	---	---	18.00	45.00	---
AvuB:											
Aura---------------	2e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
AvuC:											
Aura---------------	3e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
BerAr:											
Berryland, rarely flooded-----------	5w	---	---	---	---	---	---	---	---	---	---
BEXAS:											
Berryland, occasionally flooded-----------	5w	---	---	---	---	---	---	---	---	---	---
Mullica, occasionally flooded-----------	4w	---	---	---	---	---	---	---	---	---	---
BumA:											
Buddtown-----------	1	135.00	---	5.00	---	50.00	---	---	22.00	45.00	---
Deptford-----------	3w	110.00	---	4.50	---	40.00	---	---	22.00	40.00	---
BuuB:											
Buddtown-----------	1	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
ChsAt:											
Chicone, frequently flooded-----------	5w	---	---	---	---	---	---	---	---	---	---
CoeAs:											
Colemantown, occasionally flooded-----------	3w	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
CogB:											
Collington----------	2s	120.00	---	4.00	---	40.00	---	24.00	---	40.00	---
CogC:											
Collington----------	3s	110.00	---	3.50	---	35.00	---	22.00	---	35.00	---
CokA:											
Collington----------	1	130.00	---	5.00	---	50.00	---	26.00	---	50.00	---
CokB:											
Collington----------	2e	130.00	---	4.50	---	50.00	---	26.00	---	50.00	---
CokC:											
Collington----------	3e	120.00	---	4.50	---	45.00	---	24.00	---	45.00	---
CopB:											
Collington----------	2e	---	---	---	---	---	---	---	---	---	---
Urban land----------	8s	---	---	---	---	---	---	---	---	---	---
CosB:											
Colts Neck----------	2e	100.00	---	4.50	---	35.00	---	24.00	---	45.00	---
CosC:											
Colts Neck----------	3e	90.00	---	4.00	---	30.00	---	---	---	40.00	---
DocB:											
Downer--------------	2s	90.00	---	3.50	---	25.00	---	---	16.00	35.00	---
DocC:											
Downer--------------	3e	80.00	---	3.00	---	20.00	---	---	14.00	30.00	---
DoeA:											
Downer--------------	1	100.00	165.00	4.00	---	45.00	---	---	20.00	55.00	---
DoeB:											
Downer--------------	2e	100.00	155.00	4.00	---	45.00	---	---	20.00	55.00	---
DouB:											
Downer--------------	2e	100.00	155.00	4.00	---	45.00	---	---	20.00	55.00	---
Urban land----------	8s	---	---	---	---	---	---	---	---	---	---
EveB:											
Evesboro------------	7s	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
EveC:											
Evesboro-----------	7s	---	---	---	---	---	---	---	---	---	---
EveE:											
Evesboro-----------	7s	---	---	---	---	---	---	---	---	---	---
EvuB:											
Evesboro-----------	7s	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
FamA:											
Fallsington--------	3w	70.00	---	---	---	30.00	---	---	---	35.00	---
FapA:											
Fallsington--------	3w	70.00	---	---	---	30.00	---	---	---	35.00	---
FauB:											
Fallsington--------	3w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
FmhAt:											
Fluvaquents, loamy, frequently flooded	5w	---	---	---	---	---	---	---	---	---	---
FrfB:											
Freehold-----------	2s	110.00	---	4.00	---	40.00	---	20.00	---	40.00	---
FrfC:											
Freehold-----------	3e	110.00	---	3.50	---	35.00	---	18.00	---	35.00	---
FrkA:											
Freehold-----------	1	130.00	---	5.00	---	50.00	---	24.00	---	45.00	---
FrkB:											
Freehold-----------	2e	130.00	---	4.50	---	50.00	---	24.00	---	45.00	---
FrkC:											
Freehold-----------	3e	120.00	---	4.00	---	45.00	---	22.00	---	45.00	---
FrkD:											
Freehold-----------	4e	110.00	---	3.50	---	30.00	---	---	---	40.00	---
FrkD2:											
Freehold, eroded---	4e	105.00	---	3.00	---	25.00	---	---	---	35.00	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
FrkE:											
Freehold-----------	6e	---	---	---	---	---	---	---	---	---	---
FrkF:											
Freehold-----------	7e	---	---	---	---	---	---	---	---	---	---
FrrB:											
Freehold-----------	3e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
FrrC:											
Freehold-----------	4e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
HbmB:											
Hammonton----------	2w	90.00	---	4.50	---	30.00	---	---	20.00	35.00	---
HbrB:											
Hammonton----------	2w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
JdrA:											
Jade Run-----------	3w	---	---	---	---	---	---	---	---	---	---
JduA:											
Jade Run-----------	3w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
KemB:											
Keyport------------	2e	105.00	---	4.50	---	50.00	---	18.00	---	40.00	---
KemC2:											
Keyport, eroded----	3e	100.00	---	4.50	---	45.00	---	15.00	---	40.00	---
KeoA:											
Keyport------------	2w	110.00	---	4.50	---	50.00	---	22.00	---	40.00	---
KeuB:											
Keyport------------	2w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
KreA:											
Kresson------------	3w	120.00	---	4.50	---	40.00	---	16.00	---	40.00	---
LakB:											
Lakehurst----------	4w	---	---	---	---	---	---	---	---	---	---
LasB:											
Lakewood-----------	7s	---	---	---	---	---	---	---	---	---	---
LatvB:											
Lakewood-----------	7s	---	---	---	---	---	---	---	---	---	---
Quakerbridge-------	6s	---	---	---	---	---	---	---	---	---	---
LenA:											
Lenni--------------	4w	---	---	---	---	---	---	---	---	---	---
MakAt:											
Manahawkin, frequently flooded	7w	---	---	---	---	---	---	---	---	---	---
MamnAv:											
Mannington, very frequently flooded	8w	---	---	---	---	---	---	---	---	---	---
Nanticoke, very frequently flooded	8w	---	---	---	---	---	---	---	---	---	---
MamuAv:											
Mannington, very frequently flooded	8w	---	---	---	---	---	---	---	---	---	---
Nanticoke, very frequently flooded	8w	---	---	---	---	---	---	---	---	---	---
Udorthents---------	7s	---	---	---	---	---	---	---	---	---	---
MaoB:											
Marlton------------	2e	110.00	---	4.50	---	40.00	---	18.00	---	45.00	---
MaoC:											
Marlton------------	3e	100.00	---	4.00	---	38.00	---	16.00	---	40.00	---
MaoC2:											
Marlton, eroded----	3e	100.00	---	3.70	---	38.00	---	16.00	---	40.00	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
MaoD:											
Marlton------------	4e	80.00	---	3.50	---	35.00	---	16.00	---	35.00	---
MaoD2:											
Marlton, eroded----	4e	80.00	---	3.30	---	35.00	---	16.00	---	35.00	---
MauB:											
Marlton------------	2w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
MumA:											
Mullica------------	4w	---	---	---	---	---	---	---	---	---	---
OTKA:											
Othello------------	3w	115.00	---	3.50	---	40.00	---	---	---	---	---
Fallsington--------	3w	100.00	---	3.00	---	30.00	---	---	---	---	---
PEEAR:											
Pedricktown, rarely flooded-----------	4w	---	---	---	---	---	---	---	---	---	---
Askecksy, rarely flooded-----------	4w	---	---	---	---	---	---	---	---	---	---
Mullica, rarely flooded-----------	4w	---	---	---	---	---	---	---	---	---	---
PHG:											
Pits, sand and gravel------------	8s	---	---	---	---	---	---	---	---	---	---
SabB:											
Sassafras----------	2s	120.00	170.00	3.50	---	45.00	---	18.00	---	50.00	65.00
SabC:											
Sassafras----------	3e	110.00	170.00	3.50	---	40.00	---	---	---	45.00	65.00
SabD:											
Sassafras----------	4e	90.00	170.00	3.00	---	25.00	---	---	---	40.00	65.00
SabF:											
Sassafras----------	7e	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
SacA:											
Sassafras----------	1	130.00	175.00	4.00	---	45.00	---	26.00	---	50.00	70.00
SacB:											
Sassafras----------	2e	130.00	170.00	4.00	---	45.00	---	24.00	---	50.00	65.00
SacC:											
Sassafras----------	3e	120.00	170.00	3.50	---	40.00	---	---	---	45.00	65.00
SacD:											
Sassafras----------	4e	100.00	170.00	3.00	---	30.00	---	---	---	40.00	65.00
SapB:											
Sassafras----------	2e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
ThfB:											
Tinton-------------	3s	75.00	---	2.00	---	25.00	---	14.00	---	25.00	---
UdauB:											
Udorthents---------	7s	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
UddB:											
Udorthents, dredged materials---------	7s	---	---	---	---	---	---	---	---	---	---
UddcB:											
Udorthents, dredged coarse materials--	7s	---	---	---	---	---	---	---	---	---	---
UddfB:											
Udorthents, dredged fine materials----	7s	---	---	---	---	---	---	---	---	---	---
UddrB:											
Udorthents, dredged materials---------	7s	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
UdrB:											
Udorthents, refuse substratum--------	7s	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
UR:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
USAURB:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
Aura	2e	---	---	---	---	---	---	---	---	---	---
USDOWB:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
Downer	2e	---	---	---	---	---	---	---	---	---	---
USFREB:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
Freehold	3e	---	---	---	---	---	---	---	---	---	---
USSASB:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
Sassafras	3e	---	---	---	---	---	---	---	---	---	---
USWESB:											
Urban land	8s	---	---	---	---	---	---	---	---	---	---
Westphalia	3e	---	---	---	---	---	---	---	---	---	---
WeeB:											
Westphalia	2e	120.00	---	3.50	---	45.00	---	24.00	---	50.00	---
WeeC:											
Westphalia	3e	115.00	---	3.00	---	40.00	---	---	---	45.00	---
WeeD:											
Westphalia	4e	95.00	---	3.00	---	25.00	---	---	---	40.00	---
WeeD2:											
Westphalia, eroded	4e	90.00	---	3.00	---	25.00	---	---	---	40.00	---
WeeF:											
Westphalia	6e	---	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops in Irrigated and Nonirrigated Areas--Continued

Map symbol and soil name	Land capability	Corn		Grass-legume hay		Soybeans		Tomatoes		Wheat	
		N	I	N	I	N	I	N	I	N	I
		Bu	Bu	Tons	Tons	Bu	Bu	Tons	Tons	Bu	Bu
WehB:											
Westphalia---------	2e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
WehC:											
Westphalia---------	3e	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---
WoeA:											
Woodstown----------	2w	130.00	170.00	5.00	---	40.00	---	22.00	---	45.00	---
WoeB:											
Woodstown----------	2w	130.00	170.00	---	---	40.00	---	22.00	---	45.00	50.00
WokA:											
Woodstown----------	2w	130.00	170.00	5.00	---	40.00	---	22.00	---	45.00	50.00
Glassboro----------	3w	120.00	---	4.50	---	45.00	---	14.00	---	40.00	---
WooB:											
Woodstown----------	2w	---	---	---	---	---	---	---	---	---	---
Urban land---------	8s	---	---	---	---	---	---	---	---	---	---

Table 6.--Acreage by Capability Class and Subclass

Capability class	Capability subclass	Acreage
Unclassified	---	11,887
1	---	14,521
2	e	47,907
2	w	17,625
2	s	24,065
3	e	15,413
3	w	12,378
3	s	980
4	e	2,697
4	w	7,751
5	w	12,964
6	e	2,316
6	s	494
7	e	926
7	w	10,250
7	s	11,585
8	w	4,006
8	s	17,735

Table 7.--Prime Farmland and Other Important Farmlands

(Only the soils considered prime farmland or important farmlands are listed. Urban or built-up areas of the soils listed are not considered prime farmland or important farmlands.)

Map symbol	Map unit name
Prime farmland:	
AucB	Aura loamy sand, 0 to 5 percent slopes
AugA	Aura sandy loam, 0 to 2 percent slopes
AugB	Aura sandy loam, 2 to 5 percent slopes
AupB	Aura loam, 2 to 5 percent slopes
AvsB	Aura-Sassafras loamy sands, 0 to 5 percent slopes
AvtB	Aura-Sassafras sandy loams, 2 to 5 percent slopes
BumA	Buddtown-Deptford complex, 0 to 2 percent slopes
CogB	Collington loamy sand, 0 to 5 percent slopes
CokA	Collington sandy loam, 0 to 2 percent slopes
CokB	Collington sandy loam, 2 to 5 percent slopes
CosB	Colts Neck sandy loam, 2 to 5 percent slopes
DoeA	Downer sandy loam, 0 to 2 percent slopes
DoeB	Downer sandy loam, 2 to 5 percent slopes
FrfB	Freehold loamy sand, 0 to 5 percent slopes
FrkA	Freehold sandy loam, 0 to 2 percent slopes
FrkB	Freehold sandy loam, 2 to 5 percent slopes
KemB	Keyport sandy loam, 2 to 5 percent slopes
KeoA	Keyport loam, 0 to 2 percent slopes
MaoB	Marlton sandy loam, 2 to 5 percent slopes
SacA	Sassafras sandy loam, 0 to 2 percent slopes
SacB	Sassafras sandy loam, 2 to 5 percent slopes
WeeB	Westphalia fine sandy loam, 2 to 5 percent slopes
WoeA	Woodstown sandy loam, 0 to 2 percent slopes
WoeB	Woodstown sandy loam, 2 to 5 percent slopes
WokA	Woodstown-Glassboro complex, 0 to 2 percent slopes
Farmland of statewide importance:	
AugC	Aura sandy loam, 5 to 10 percent slopes
AvsC	Aura-Sassafras loamy sands, 5 to 10 percent slopes
AvtC	Aura-Sassafras sandy loams, 5 to 10 percent slopes
AvtC2	Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded
CogC	Collington loamy sand, 5 to 10 percent slopes
CokC	Collington sandy loam, 5 to 10 percent slopes
CosC	Colts Neck sandy loam, 5 to 10 percent slopes
DocB	Downer loamy sand, 0 to 5 percent slopes
DocC	Downer loamy sand, 5 to 10 percent slopes
FamA	Fallsington sandy loam, 0 to 2 percent slopes
FapA	Fallsington loam, 0 to 2 percent slopes
FrfC	Freehold loamy sand, 5 to 10 percent slopes
FrkC	Freehold sandy loam, 5 to 10 percent slopes
HbmB	Hammonton loamy sand, 0 to 5 percent slopes
JdrA	Jade Run fine sandy loam, 0 to 2 percent slopes
KemC2	Keyport sandy loam, 5 to 10 percent slopes, eroded
KreA	Kresson fine sandy loam, 0 to 2 percent slopes
LenA	Lenni loam, 0 to 2 percent slopes
MaoC	Marlton sandy loam, 5 to 10 percent slopes
MaoC2	Marlton sandy loam, 5 to 10 percent slopes, eroded
MumA	Mullica sandy loam, 0 to 2 percent slopes
OTKA	Othello and Fallsington soils, 0 to 2 percent slopes
SabB	Sassafras loamy sand, 0 to 5 percent slopes
SabC	Sassafras loamy sand, 5 to 10 percent slopes
SacC	Sassafras sandy loam, 5 to 10 percent slopes
SacD	Sassafras sandy loam, 10 to 15 percent slopes
ThfB	Tinton sand, 0 to 5 percent slopes
WeeC	Westphalia fine sandy loam, 5 to 10 percent slopes

Table 7.--Prime Farmland and Other Important Farmlands--Continued

Map symbol	Map unit name
Farmland of unique importance:	
AtsA	Atsion sand, 0 to 2 percent slopes
AtsAr	Atsion sand, 0 to 2 percent slopes, rarely flooded
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded
BEXAS	Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded
MamnAv	Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded
MamuAv	Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded

Table 8a.--Agricultural Waste Management (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
AtsA:					
Atsion	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.99	Too acid	1.00
		Leaching	0.50	Droughty	0.38
		Droughty	0.38		
AtsAr:					
Atsion, rarely flooded	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.99	Too acid	1.00
		Leaching	0.50	Flooding	0.40
AucB:					
Aura	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.31
		Too acid	0.05	Too acid	0.21
		Filtering capacity	0.01	Filtering capacity	0.01
AugA:					
Aura	80	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
AugB:					
Aura	85	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
AugC:					
Aura	90	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
AupB:					
Aura----------------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.31
		Too acid	0.05	Too acid	0.21
		Filtering capacity	0.01	Filtering capacity	0.01
AvsB:					
Aura----------------	65	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.31
		Too acid	0.05	Too acid	0.21
		Filtering capacity	0.01	Filtering capacity	0.01
Sassafras-----------	30	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
AvsC:					
Aura----------------	65	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.31
		Too acid	0.05	Too acid	0.21
		Filtering capacity	0.01	Filtering capacity	0.01
Sassafras-----------	30	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
AvtB:					
Aura----------------	60	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
Sassafras-----------	30	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
AvtC:					
Aura----------------	65	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
Sassafras-----------	30	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
AvtC2:					
Aura, eroded--------	65	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
Sassafras, eroded---	30	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
AvuB:					
Aura----------------	60	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
AvuC:					
Aura----------------	60	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
BerAr:					
Berryland, rarely flooded-----------	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.70	Flooding	0.40
BEXAS:					
Berryland, occasionally flooded-----------	50	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.86	Flooding	1.00
		Leaching	0.70	Too acid	1.00

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
BEXAS:					
Mullica, occasionally flooded	40	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Flooding	1.00
		Flooding	0.60	Too acid	1.00
BumA:					
Buddtown	65	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.03
Deptford	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.01	Too acid	0.03
BuuB:					
Buddtown	65	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.03
Urban land	25	Not rated		Not rated	
ChsAt:					
Chicone, frequently flooded	95	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Runoff	0.40	Too acid	0.91
		Too acid	0.32		
CoeAs:					
Colemantown, occasionally flooded	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
		Flooding	0.60	Slow water movement	1.00
		Leaching	0.50	Too acid	0.99

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
CogB:					
Collington----------	85	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Filtering capacity	0.01	Filtering capacity	0.01
CogC:					
Collington----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Filtering capacity	0.01	Filtering capacity	0.01
CokA:					
Collington----------	85	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
CokB:					
Collington----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
CokC:					
Collington----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
CopB:					
Collington----------	60	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
CosB:					
Colts Neck----------	90	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
CosC:					
Colts Neck----------	90	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
DocB:					
Downer--------------	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.01	Too acid	0.03
DocC:					
Downer--------------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.01	Too acid	0.03
DoeA:					
Downer--------------	85	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
DoeB:					
Downer	90	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
DouB:					
Downer	60	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land	30	Not rated		Not rated	
EveB:					
Evesboro	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.38		
		Droughty	0.02		
EveC:					
Evesboro	95	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.38		
		Droughty	0.02		
EveE:					
Evesboro	95	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.38		
EvuB:					
Evesboro	60	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.38		
		Droughty	0.02		
Urban land	30	Not rated		Not rated	
FamA:					
Fallsington	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.70	Filtering capacity	0.01
		Filtering capacity	0.01		

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
FapA:					
Fallsington---------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.70	Filtering capacity	0.01
		Filtering capacity	0.01		
FauB:					
Fallsington---------	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.70	Filtering capacity	0.01
		Filtering capacity	0.01		
Urban land----------	20	Not rated		Not rated	
FmhAt:					
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Leaching	0.70	Too acid	0.42
		Too acid	0.11	Filtering capacity	0.01
FrfB:					
Freehold------------	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.11	Too acid	0.42
FrfC:					
Freehold------------	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.11	Too acid	0.42
FrkA:					
Freehold------------	90	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
FrkB:					
Freehold------------	85	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
FrkC:					
Freehold------------	90	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
FrkD:					
Freehold-----------	90	Somewhat limited		Very limited	
		Slope	0.84	Too acid	1.00
		Too acid	0.62	Slope	0.84
		Filtering capacity	0.01	Filtering capacity	0.01
FrkD2:					
Freehold, eroded----	90	Somewhat limited		Very limited	
		Slope	0.84	Too acid	1.00
		Too acid	0.62	Slope	0.84
		Filtering capacity	0.01	Filtering capacity	0.01
FrkE:					
Freehold-----------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
FrkF:					
Freehold-----------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
FrrB:					
Freehold-----------	60	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
FrrC:					
Freehold-----------	60	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
HbmB:					
Hammonton----------	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.22	Too acid	0.77
HbrB:					
Hammonton----------	70	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.22	Too acid	0.77
Urban land----------	20	Not rated		Not rated	

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
JdrA:					
Jade Run------------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching	0.70	Too acid	0.03
		Too acid	0.01		
JduA:					
Jade Run------------	75	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching	0.70	Too acid	0.03
		Too acid	0.01		
Urban land----------	15	Not rated		Not rated	
KemB:					
Keyport-------------	85	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.05	Too acid	0.21
KemC2:					
Keyport, eroded-----	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Too acid	1.00
		Too acid	0.62	Depth to saturated zone	0.86
KeoA:					
Keyport-------------	80	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.05	Too acid	0.21
KeuB:					
Keyport-------------	70	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.05	Too acid	0.21
Urban land----------	20	Not rated		Not rated	
KreA:					
Kresson-------------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.32	Too acid	0.91

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
LakB:					
Lakehurst	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.99	Too acid	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Leaching	0.45		
LasB:					
Lakewood	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.17		
		Droughty	0.02		
LatvB:					
Lakewood	65	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.86	Too acid	1.00
		Leaching	0.45	Droughty	0.02
		Low adsorption	0.17		
		Droughty	0.02		
Quakerbridge	30	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.99	Too acid	1.00
		Leaching	0.45		
LenA:					
Lenni	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Leaching	0.50	Too acid	0.21
		Too acid	0.05	Filtering capacity	0.01
		Filtering capacity	0.01		
MakAt:					
Manahawkin, frequently flooded	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Too acid	0.62	Too acid	1.00

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
MamnAv:					
Mannington, very frequently flooded-	55	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.41	Too acid	0.42
		Runoff	0.40	Slow water movement	0.31
Nanticoke, very frequently flooded-	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.41	Too acid	0.42
		Runoff	0.40	Slow water movement	0.31
MamuAv:					
Mannington, very frequently flooded-	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.41	Too acid	0.42
		Runoff	0.40	Slow water movement	0.31
Nanticoke, very frequently flooded-	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.41	Too acid	0.42
		Runoff	0.40	Slow water movement	0.31
Udorthents----------	20	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Slow water movement	0.41	Slow water movement	0.31
		Runoff	0.40		
MaoB:					
Marlton------------	80	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.22	Too acid	0.77
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
MaoC:					
Marlton-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.22	Too acid	0.77
		Filtering capacity	0.01	Filtering capacity	0.01
MaoC2:					
Marlton, eroded-----	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Too acid	1.00
		Too acid	0.62	Depth to saturated zone	0.86
		Low adsorption	0.13	Low adsorption	0.11
MaoD:					
Marlton-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Slope	0.63	Too acid	0.77
		Too acid	0.22	Slope	0.63
		Filtering capacity	0.01	Filtering capacity	0.01
MaoD2:					
Marlton, eroded-----	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Too acid	1.00
		Slope	0.63	Depth to saturated zone	0.86
		Too acid	0.62	Slope	0.63
		Low adsorption	0.13	Low adsorption	0.11
MauB:					
Marlton-------------	55	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.86	Too acid	1.00
		Too acid	0.62	Depth to saturated zone	0.86
		Low adsorption	0.11	Low adsorption	0.04
Urban land----------	35	Not rated		Not rated	
MumA:					
Mullica-------------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Runoff	0.40		

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
OTKA:					
Othello	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.50	Filtering capacity	0.01
		Filtering capacity	0.01		
Fallsington	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.70	Filtering capacity	0.01
		Filtering capacity	0.01		
PEEAR:					
Pedricktown, rarely flooded	45	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Too acid	1.00
		Too acid	0.94	Ponding	1.00
		Runoff	0.40	Flooding	0.40
Askecksy, rarely flooded	35	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.94	Too acid	1.00
		Leaching	0.90	Droughty	0.73
Mullica, rarely flooded	20	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Too acid	1.00
		Too acid	0.94	Ponding	1.00
		Runoff	0.40	Flooding	0.40
PHG:					
Pits, sand and gravel	100	Not rated		Not rated	
SabB:					
Sassafras	85	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SabC:					
Sassafras	90	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
SabD:					
Sassafras-----------	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SabF:					
Sassafras-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SacA:					
Sassafras-----------	80	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SacB:					
Sassafras-----------	80	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SacC:					
Sassafras-----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SacD:					
Sassafras-----------	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Too acid	0.01	Too acid	0.03
		Filtering capacity	0.01	Filtering capacity	0.01
SapB:					
Sassafras-----------	60	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
ThfB:					
Tinton--------------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Leaching	0.45	Too acid	0.14
		Too acid	0.03		
UdauB:					
Udorthents----------	60	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
UdauB:					
Urban land----------	40	Not rated		Not rated	
UddB:					
Udorthents, dredged materials----------	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.22	Too acid	0.77
UddcB:					
Udorthents, dredged coarse materials---	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Leaching	0.45	Too acid	0.77
		Too acid	0.22		
UddfB:					
Udorthents, dredged fine materials-----	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
UddrB:					
Udorthents, dredged materials----------	65	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.22	Too acid	0.77
Urban land----------	35	Not rated		Not rated	
UdrB:					
Udorthents, refuse substratum---------	100	Somewhat limited		Not limited	
		Runoff	0.40		
UR:					
Urban land----------	95	Not rated		Not rated	
USAURB:					
Urban land----------	75	Not rated		Not rated	
Aura----------------	15	Somewhat limited		Very limited	
		Too acid	0.94	Too acid	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Filtering capacity	0.01	Filtering capacity	0.01
USDOWB:					
Urban land----------	80	Not rated		Not rated	
Downer--------------	15	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
USFREB:					
Urban land----------	75	Not rated		Not rated	
Freehold-----------	20	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
USSASB:					
Urban land----------	75	Not rated		Not rated	
Sassafras-----------	15	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
		Filtering capacity	0.01	Filtering capacity	0.01
USWESB:					
Urban land----------	80	Not rated		Not rated	
Westphalia----------	15	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.62	Too acid	1.00
WATER:					
Water---------------	100	Not rated		Not rated	
WeeB:					
Westphalia----------	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.62	Too acid	1.00
WeeC:					
Westphalia----------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.62	Too acid	1.00
WeeD:					
Westphalia----------	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.63	Too acid	1.00
		Too acid	0.62	Slope	0.63
WeeD2:					
Westphalia, eroded--	90	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.63	Too acid	1.00
		Too acid	0.62	Slope	0.63
WeeF:					
Westphalia----------	85	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00

Table 8a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
WehB:					
Westphalia----------	55	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.62	Too acid	1.00
Urban land----------	30	Not rated		Not rated	
WehC:					
Westphalia----------	60	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Too acid	0.62	Too acid	1.00
Urban land----------	30	Not rated		Not rated	
WoeA:					
Woodstown-----------	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.01
		Filtering capacity	0.01	Filtering capacity	0.01
WoeB:					
Woodstown-----------	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.01
		Filtering capacity	0.01	Filtering capacity	0.01
WokA:					
Woodstown-----------	70	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.01
		Filtering capacity	0.01	Filtering capacity	0.01
Glassboro-----------	15	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.01	Too acid	0.01
WooB:					
Woodstown-----------	65	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.01	Too acid	0.01
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land----------	20	Not rated		Not rated	

Table 8b.--Agricultural Waste Management (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AtsA:					
Atsion	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Too acid	0.42	Depth to saturated zone	1.00
				Too acid	1.00
AtsAr:					
Atsion, rarely flooded	85	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Too acid	0.42	Depth to saturated zone	1.00
				Too acid	1.00
AucB:					
Aura	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.21
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
AugA:					
Aura	80	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
AugB:					
Aura	85	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
AugC:					
Aura	90	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.77	Slow water movement	0.21
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AupB:					
Aura----------------	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.21
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
AvsB:					
Aura----------------	65	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.21
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
Sassafras-----------	30	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01
AvsC:					
Aura----------------	65	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too acid	0.21
		Too acid	0.77	Slow water movement	0.21
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
Sassafras-----------	30	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too steep for sprinkler irrigation	0.06
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01
AvtB:					
Aura----------------	60	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
Sassafras-----------	30	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.03	Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
AvtC:					
Aura	65	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.77	Slow water movement	0.21
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
Sassafras	30	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.03	Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
AvtC2:					
Aura, eroded	65	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.77	Slow water movement	0.21
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
Sassafras, eroded	30	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.03	Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
AvuB:					
Aura	60	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01
Urban land	30	Not rated		Not rated	

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AvuC:					
Aura----------------	60	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.77	Slow water movement	0.21
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
BerAr:					
Berryland, rarely flooded------------	85	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Too acid	0.42	Depth to saturated zone	1.00
				Too acid	1.00
BEXAS:					
Berryland, occasionally flooded------------	50	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Flooding	0.60	Depth to saturated zone	1.00
		Too acid	0.42	Too acid	1.00
				Flooding	0.60
Mullica, occasionally flooded------------	40	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Slow water movement	0.61	Depth to saturated zone	1.00
		Flooding	0.60	Too acid	1.00
		Too acid	0.42	Flooding	0.60
BumA:					
Buddtown------------	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Depth to saturated zone	0.86
		Too acid	0.03	Too acid	0.03
Deptford------------	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	0.03
		Too acid	0.03		

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
BuuB:					
Buddtown	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Depth to saturated zone	0.86
		Too acid	0.03	Too acid	0.03
Urban land	25	Not rated		Not rated	
ChsAt:					
Chicone, frequently flooded	95	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.91
		Too acid	0.77		
CoeAs:					
Colemantown, occasionally flooded	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.99
		Flooding	0.60	Slow water movement	0.96
				Flooding	0.60
CogB:					
Collington	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.96
		Too acid	0.14	Filtering capacity	0.01
CogC:					
Collington	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.96
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.14	Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
CokA:					
Collington	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.96
		Too acid	0.14		
CokB:					
Collington	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.96
		Too acid	0.14		

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
CokC:					
Collington----------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.96
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.14	Too steep for sprinkler irrigation	0.06
CopB:					
Collington----------	60	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.14	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
CosB:					
Colts Neck----------	90	Somewhat limited		Very limited	
		Slow water movement	0.61	Too acid	1.00
				Filtering capacity	0.01
CosC:					
Colts Neck----------	90	Somewhat limited		Very limited	
		Slope	0.88	Too acid	1.00
		Slow water movement	0.61	Too steep for surface application	0.92
				Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
DocB:					
Downer--------------	80	Somewhat limited		Very limited	
		Slow water movement	0.61	Filtering capacity	1.00
		Too acid	0.03	Too acid	0.03
DocC:					
Downer--------------	90	Somewhat limited		Very limited	
		Slope	0.88	Filtering capacity	1.00
		Slow water movement	0.61	Too steep for surface application	0.92
		Too acid	0.03	Too steep for sprinkler irrigation	0.06
				Too acid	0.03
DoeA:					
Downer--------------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.61	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
DoeB:					
Downer	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.61	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01
DouB:					
Downer	60	Somewhat limited		Somewhat limited	
		Slow water movement	0.61	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
Urban land	30	Not rated		Not rated	
EveB:					
Evesboro	80	Somewhat limited		Very limited	
		Too acid	0.03	Filtering capacity	1.00
				Too acid	1.00
				Low adsorption	0.38
EveC:					
Evesboro	95	Somewhat limited		Very limited	
		Slope	0.88	Filtering capacity	1.00
		Too acid	0.03	Too acid	1.00
				Too steep for surface application	0.92
				Low adsorption	0.38
				Too steep for sprinkler irrigation	0.06
EveE:					
Evesboro	95	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Too acid	0.03	Too steep for surface application	1.00
				Too steep for sprinkler irrigation	1.00
				Too acid	1.00
				Low adsorption	0.38
EvuB:					
Evesboro	60	Somewhat limited		Very limited	
		Too acid	0.03	Filtering capacity	1.00
				Too acid	1.00
				Low adsorption	0.38
Urban land	30	Not rated		Not rated	
FamA:					
Fallsington	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.42	Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
FapA:					
Fallsington---------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.42	Filtering capacity	0.01
FauB:					
Fallsington---------	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.42	Filtering capacity	0.01
Urban land----------	20	Not rated		Not rated	
FmhAt:					
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.42
				Filtering capacity	0.01
FrfB:					
Freehold------------	80	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Too acid	0.03	Too acid	0.42
FrfC:					
Freehold------------	85	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Slope	0.88	Too steep for surface application	0.92
		Too acid	0.03	Too acid	0.42
				Too steep for sprinkler irrigation	0.06
FrkA:					
Freehold------------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
FrkB:					
Freehold------------	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
FrkC:					
Freehold-----------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too acid	0.42
		Too acid	0.03	Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
FrkD:					
Freehold-----------	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	1.00
				Filtering capacity	0.01
FrkD2:					
Freehold, eroded----	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	1.00
				Filtering capacity	0.01
FrkE:					
Freehold-----------	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	0.42
				Filtering capacity	0.01
FrkF:					
Freehold-----------	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	0.42
				Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
FrrB:					
Freehold	60	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
Urban land	30	Not rated		Not rated	
FrrC:					
Freehold	60	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too acid	0.42
		Too acid	0.03	Too steep for sprinkler irrigation	0.06
				Filtering capacity	0.01
Urban land	30	Not rated		Not rated	
HbmB:					
Hammonton	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.31	Depth to saturated zone	0.86
		Too acid	0.14	Too acid	0.77
HbrB:					
Hammonton	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.31	Depth to saturated zone	0.86
		Too acid	0.14	Too acid	0.77
Urban land	20	Not rated		Not rated	
JdrA:					
Jade Run	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.61	Depth to saturated zone	1.00
		Too acid	0.07	Too acid	0.03
JduA:					
Jade Run	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.61	Depth to saturated zone	1.00
		Too acid	0.07	Too acid	0.03
Urban land	15	Not rated		Not rated	

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
KemB:					
Keyport-------------	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
				Too acid	0.21
KemC2:					
Keyport, eroded-----	95	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
		Slope	0.88	Too steep for surface application	0.92
				Depth to saturated zone	0.86
				Too steep for sprinkler irrigation	0.06
KeoA:					
Keyport-------------	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
				Too acid	0.21
KeuB:					
Keyport-------------	70	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
				Too acid	0.21
Urban land----------	20	Not rated		Not rated	
KreA:					
Kresson-------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
		Too acid	0.14	Too acid	0.91
LakB:					
Lakehurst-----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Too acid	0.42	Too acid	1.00
				Depth to saturated zone	0.86
LasB:					
Lakewood------------	85	Somewhat limited		Very limited	
		Too acid	0.42	Filtering capacity	1.00
				Too acid	1.00
				Low adsorption	0.17

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
LatvB:					
Lakewood-----------	65	Somewhat limited		Very limited	
		Too acid	0.42	Filtering capacity	1.00
				Too acid	1.00
				Low adsorption	0.17
Quakerbridge--------	30	Somewhat limited		Very limited	
		Too acid	0.03	Filtering capacity	1.00
				Too acid	1.00
LenA:					
Lenni---------------	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
		Too acid	0.03	Too acid	0.21
				Filtering capacity	0.01
MakAt:					
Manahawkin, frequently flooded-	85	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.03	Flooding	1.00
				Too acid	1.00
MamnAv:					
Mannington, very frequently flooded-	55	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Too acid	0.42
				Slow water movement	0.21
Nanticoke, very frequently flooded-	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Too acid	0.42
				Slow water movement	0.21
MamuAv:					
Mannington, very frequently flooded-	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
MamuAv:					
Nanticoke, very frequently flooded	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
Udorthents	20	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to saturated zone	0.86
		Depth to saturated zone	1.00	Slow water movement	0.21
MaoB:					
Marlton	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
				Too acid	0.77
				Filtering capacity	0.01
MaoC:					
Marlton	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Too steep for surface application	0.92
		Slope	0.88	Depth to saturated zone	0.86
				Too acid	0.77
				Too steep for sprinkler irrigation	0.06
MaoC2:					
Marlton, eroded	95	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
		Slope	0.88	Too steep for surface application	0.92
				Depth to saturated zone	0.86
				Low adsorption	0.13
MaoD:					
Marlton	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
				Depth to saturated zone	0.86
				Too acid	0.77

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
MaoD2:					
Marlton, eroded-----	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Depth to saturated zone	1.00	Too acid	1.00
				Slow water movement	0.96
				Depth to saturated zone	0.86
MauB:					
Marlton-------------	55	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
				Depth to saturated zone	0.86
				Low adsorption	0.11
Urban land----------	35	Not rated		Not rated	
MumA:					
Mullica-------------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.61	Depth to saturated zone	1.00
		Too acid	0.42	Too acid	1.00
OTKA:					
Othello-------------	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Filtering capacity	0.01
Fallsington---------	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.42	Filtering capacity	0.01
PEEAR:					
Pedricktown, rarely flooded-----------	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Too acid	1.00
				Ponding	1.00

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
PEEAR:					
Askecksy, rarely flooded	35	Very limited		Very limited	
		Ponding	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Too acid	0.77	Depth to saturated zone	1.00
				Too acid	1.00
Mullica, rarely flooded	20	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Slow water movement	0.61	Too acid	1.00
		Too acid	0.42	Ponding	1.00
PHG:					
Pits, sand and gravel	100	Not rated		Not rated	
SabB:					
Sassafras	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01
SabC:					
Sassafras	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too steep for sprinkler irrigation	0.06
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01
SabD:					
Sassafras	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01
SabF:					
Sassafras	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
SacA:					
Sassafras-----------	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01
SacB:					
Sassafras-----------	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.03
		Too acid	0.03	Filtering capacity	0.01
SacC:					
Sassafras-----------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.92
		Slope	0.88	Too steep for sprinkler irrigation	0.06
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01
SacD:					
Sassafras-----------	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.03	Too acid	0.03
				Filtering capacity	0.01
SapB:					
Sassafras-----------	60	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
Urban land----------	30	Not rated		Not rated	
ThfB:					
Tinton--------------	90	Somewhat limited		Very limited	
		Slow water movement	0.31	Filtering capacity	1.00
		Too acid	0.14	Too acid	0.14
UdauB:					
Udorthents----------	60	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
				Too acid	0.77
				Too steep for surface application	0.08
Urban land----------	40	Not rated		Not rated	

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
UddB:					
Udorthents, dredged materials	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
				Too acid	0.77
				Too steep for surface application	0.08
UddcB:					
Udorthents, dredged coarse materials	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
				Too acid	0.77
				Too steep for surface application	0.08
UddfB:					
Udorthents, dredged fine materials	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
				Too acid	0.77
				Too steep for surface application	0.08
UddrB:					
Udorthents, dredged materials	65	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
				Too acid	0.77
				Too steep for surface application	0.08
Urban land	35	Not rated		Not rated	
UdrB:					
Udorthents, refuse substratum	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too steep for surface application	0.08
UR:					
Urban land	95	Not rated		Not rated	
USAURB:					
Urban land	75	Not rated		Not rated	
Aura	15	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.77	Slow water movement	0.21
				Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
USDOWB:					
Urban land----------	80	Not rated		Not rated	
Downer--------------	15	Somewhat limited		Somewhat limited	
		Slow water movement	0.61	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
USFREB:					
Urban land----------	75	Not rated		Not rated	
Freehold------------	20	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
USSASB:					
Urban land----------	75	Not rated		Not rated	
Sassafras-----------	15	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Too acid	0.03	Filtering capacity	0.01
USWESB:					
Urban land----------	80	Not rated		Not rated	
Westphalia----------	15	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Too acid	0.14	Too acid	1.00
WeeB:					
Westphalia----------	80	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Too acid	0.14	Too acid	1.00
WeeC:					
Westphalia----------	90	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Slope	0.88	Too acid	1.00
		Too acid	0.14	Too steep for surface application	0.92
				Too steep for sprinkler irrigation	0.06
WeeD:					
Westphalia----------	90	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	1.00
				Too acid	1.00

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
WeeD2:					
Westphalia, eroded--	90	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
WeeF:					
Westphalia----------	85	Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
WehB:					
Westphalia----------	55	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Too acid	0.14	Too acid	1.00
Urban land----------	30	Not rated		Not rated	
WehC:					
Westphalia----------	60	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	1.00
		Slope	0.88	Too acid	1.00
		Too acid	0.14	Too steep for surface application	0.92
				Too steep for sprinkler irrigation	0.06
Urban land----------	30	Not rated		Not rated	
WoeA:					
Woodstown-----------	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Slow water movement	1.00	Too acid	0.01
				Filtering capacity	0.01
WoeB:					
Woodstown-----------	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Slow water movement	1.00	Too acid	0.01
				Filtering capacity	0.01

Table 8b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
WokA:					
Woodstown-----------	70	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Slow water movement	1.00	Too acid	0.01
				Filtering capacity	0.01
Glassboro-----------	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Filtering capacity	1.00
		Slow water movement	0.61	Depth to saturated zone	1.00
		Too acid	0.14	Too acid	0.01
WooB:					
Woodstown-----------	65	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Slow water movement	1.00	Too acid	0.01
				Filtering capacity	0.01
Urban land----------	20	Not rated		Not rated	

Table 9.--Forestland Productivity

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AtsA:				
Atsion------------------	pitch pine----------	65	75	pitch pine, red maple, sweetgum
	red maple-----------	---	---	
	blackgum------------	---	---	
AtsAr:				
Atsion, rarely flooded--	pitch pine----------	65	75	pitch pine, red maple, sweetgum
	red maple-----------	---	---	
	blackgum------------	---	---	
AucB:				
Aura--------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
AugA:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
AugB:				
Aura--------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
AugC:				
Aura--------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
AupB:				
Aura--------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	chestnut oak--------	---	---	
AvsB:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
Sassafras---------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, northern red oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AvsC:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
Sassafras---------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, northern red oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	---	---	
AvtB:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
Sassafras---------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, northern red oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	---	---	
AvtC:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
Sassafras---------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, northern red oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	---	---	
AvtC2:				
Aura, eroded------------	pitch pine----------	---	---	shortleaf pine, eastern white pine, black oak
	black oak-----------	65	65	
	white oak-----------	65	65	
	red cedar-----------	65	65	
Sassafras, eroded-------	pitch pine----------	---	---	shortleaf pine, eastern white pine, black oak
	black oak-----------	65	52	
	white oak-----------	65	52	
	red cedar-----------	65	52	
AvuB:				
Aura--------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, pin oak, flowering crabapple, flowering dogwood
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	chestnut oak--------	---	---	
	pitch pine----------	---	---	
Urban land--------------	---	---	---	---

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AvuC:				
Aura	black oak	70	57	shortleaf pine, eastern white pine, black oak, pin oak, flowering crabapple, flowering dogwood
	white oak	70	57	
	scarlet oak	70	57	
	chestnut oak	---	---	
	pitch pine	---	---	
Urban land	---	---	---	---
BerAr:				
Berryland, rarely flooded	pitch pine	60	---	pitch pine, red maple, Atlantic white cedar
	red maple	---	---	
	blackgum	---	---	
BEXAS:				
Berryland, occasionally flooded	pitch pine	60	---	pitch pine, red maple, Atlantic white cedar
	red maple	---	---	
	blackgum	---	---	
Mullica, occasionally flooded	sweetgum	80	100	sweetgum, yellow-poplar, red maple, Atlantic white cedar
	red maple	---	---	
	blackgum	---	---	
	pitch pine	---	---	
BumA:				
Buddtown	yellow-poplar	100	114	northern red oak, yellow-poplar, eastern white pine, sweetgum
	sweetgum	90	100	
	white oak	---	---	
	red maple	---	---	
Deptford	yellow-poplar	100	114	yellow-poplar, eastern white pine, sweetgum, willow oak
	sweetgum	90	100	
	red maple	---	---	
	white oak	---	---	
BuuB:				
Buddtown	yellow-poplar	100	114	willow oak, sugar maple, eastern white pine, yellow-poplar, American sycamore, flowering crabapple, flowering dogwood
	sweetgum	90	100	
	white oak	---	---	
	red maple	---	---	
Urban land	---	---	---	---
ChsAt:				
Chicone, frequently flooded	black willow	---	---	sweetgum, Atlantic white cedar, red maple, willow oak
	red maple	50	29	
	sweetgum	85	86	
CoeAs:				
Colemantown, occasionally flooded	sweetgum	85	86	sweetgum, yellow-poplar, red maple, willow oak
	red maple	---	---	
	yellow-poplar	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
CogB:				
Collington	black oak	80	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
CogC:				
Collington	black oak	80	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
CokA:				
Collington	black oak	80	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
CokB:				
Collington	black oak	80	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
CokC:				
Collington	black oak	80	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
CopB:				
Collington	black oak	80	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
	American beech	---	---	
Urban land	---	---	---	---
CosB:				
Colts Neck	black oak	80	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	70	57	
	white oak	---	---	
	scarlet oak	---	---	
CosC:				
Colts Neck	black oak	80	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	70	57	
	white oak	---	---	
	scarlet oak	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
DocB:				
Downer------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak, white oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	pitch pine----------	---	---	
DocC:				
Downer------------------	black oak-----------	70	57	shortleaf pine, eastern white pine, black oak, white oak
	white oak-----------	70	57	
	scarlet oak---------	70	57	
	pitch pine----------	---	---	
DoeA:				
Downer------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak, white oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	pitch pine----------	---	---	
DoeB:				
Downer------------------	black oak-----------	70	52	shortleaf pine, eastern white pine, black oak, white oak
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	pitch pine----------	---	---	
DouB:				
Downer------------------	black oak-----------	70	52	shortleaf pine, pin oak, scarlet oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	white oak-----------	70	52	
	scarlet oak---------	70	52	
	pitch pine----------	---	---	
Urban land--------------	---	---	---	---
EveB:				
Evesboro----------------	pitch pine----------	60	---	shortleaf pine, pitch pine, white oak, Virginia pine
	chestnut oak--------	60	52	
	white oak-----------	60	52	
	scarlet oak---------	---	---	
EveC:				
Evesboro----------------	pitch pine----------	60	---	shortleaf pine, pitch pine, white oak, Virginia pine
	chestnut oak--------	60	52	
	white oak-----------	60	52	
	scarlet oak---------	---	---	
EveE:				
Evesboro----------------	pitch pine----------	60	---	shortleaf pine, pitch pine, white oak, Virginia pine
	chestnut oak--------	60	48	
	white oak-----------	60	48	
	post oak------------	---	---	
EvuB:				
Evesboro----------------	pitch pine----------	60	---	shortleaf pine, white oak, post oak, scarlet oak
	chestnut oak--------	60	48	
	white oak-----------	60	48	
	post oak------------	---	---	
Urban land--------------	---	---	---	---

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
FamA:				
Fallsington	sweetgum	80	86	sweetgum, yellow-poplar, red maple
	blackgum	---	---	
	red maple	---	---	
	yellow-poplar	---	---	
FapA:				
Fallsington	sweetgum	80	86	sweetgum, yellow-poplar, red maple
	blackgum	---	---	
	red maple	---	---	
	yellow-poplar	---	---	
FauB:				
Fallsington	sweetgum	80	86	sweetgum, yellow-poplar, red maple
	blackgum	---	---	
	red maple	---	---	
	yellow-poplar	---	---	
Urban land	---	---	---	---
FmhAt:				
Fluvaquents, loamy, frequently flooded	pin oak	70	84	eastern white pine, white spruce
	sweetgum	---	---	
FrfB:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrfC:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrkA:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrkB:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrkC:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrkD:				
Freehold	black oak	75	57	shortleaf pine, eastern white pine, black oak
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
FrkD2:				
Freehold, eroded	black oak	75	57	shortleaf pine, eastern white pine, black oak
	northern red oak	75	57	
	white oak	75	57	
	yellow-poplar	85	86	
FrkE:				
Freehold	black oak	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	70	57	
	white oak	70	57	
	yellow-poplar	80	86	
FrkF:				
Freehold	black oak	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	northern red oak	70	57	
	white oak	70	57	
	yellow-poplar	80	86	
FrrB:				
Freehold	black oak	80	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
Urban land	---	---	---	---
FrrC:				
Freehold	black oak	80	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	northern red oak	80	57	
	white oak	80	57	
	yellow-poplar	90	86	
Urban land	---	---	---	---
HbmB:				
Hammonton	white oak	70	52	shortleaf pine, eastern white pine, white oak, yellow-poplar
	black oak	70	52	
	pitch pine	70	114	
	red maple	---	---	
HbrB:				
Hammonton	white oak	80	62	willow oak, sugar maple, eastern white pine, yellow-poplar, American sycamore, flowering crabapple, flowering dogwood
	black oak	80	62	
	pitch pine	80	114	
	yellow-poplar	---	---	
	red maple	---	---	
Urban land	---	---	---	---

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
JdrA:				
Jade Run	white oak	---	---	willow oak, sweetgum, yellow-poplar, red maple, American sycamore
	sweetgum	90	100	
	red maple	---	---	
	water oak	90	---	
	green ash	80	57	
	American holly	---	---	
JduA:				
Jade Run	white oak	---	---	red maple, willow oak, sweetgum, yellow-poplar, weeping willow
	sweetgum	90	100	
	red maple	---	---	
	water oak	90	---	
	green ash	80	57	
	American holly	---	---	
Urban land	---	---	---	---
KemB:				
Keyport	yellow-poplar	90	86	yellow-poplar, eastern white pine, sweetgum, northern red oak
	American beech	80	57	
	sweetgum	---	---	
	red maple	---	---	
	white oak	---	---	
KemC2:				
Keyport, eroded	yellow-poplar	85	75	shortleaf pine, eastern white pine, black oak
	sweetgum	---	---	
	American beech	---	---	
	red maple	---	---	
	white oak	---	---	
KeoA:				
Keyport	yellow-poplar	90	86	yellow-poplar, eastern white pine, sweetgum, northern red oak
	American beech	80	57	
	sweetgum	---	---	
	red maple	---	---	
	white oak	---	---	
KeuB:				
Keyport	yellow-poplar	90	86	willow oak, sugar maple, eastern white pine, yellow-poplar, American sycamore, flowering crabapple, flowering dogwood
	sweetgum	90	100	
	American beech	80	57	
	red maple	---	---	
	white oak	---	---	
Urban land	---	---	---	---
KreA:				
Kresson	sweetgum	90	100	yellow-poplar, eastern white pine, sweetgum, willow oak
	yellow-poplar	90	86	
	white oak	80	57	
	willow oak	80	57	
	red maple	---	---	
	American beech	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
LakB:				
Lakehurst	pitch pine	60	---	pitch pine, shortleaf pine, eastern white pine, scarlet oak
	chestnut oak	---	---	
	post oak	---	---	
	scarlet oak	---	---	
LasB:				
Lakewood	pitch pine	60	---	pitch pine, shortleaf pine
	chestnut oak	---	---	
	post oak	---	---	
	scarlet oak	---	---	
LatvB:				
Lakewood	pitch pine	60	---	pitch pine, shortleaf pine
	chestnut oak	---	---	
	post oak	---	---	
	scarlet oak	---	---	
Quakerbridge	pitch pine	60	---	pitch pine, shortleaf pine, scarlet oak
	chestnut oak	---	---	
	post oak	---	---	
	scarlet oak	---	---	
LenA:				
Lenni	sweetgum	90	100	willow oak, sweetgum, yellow-poplar, red maple, American sycamore
	white oak	---	---	
	red maple	---	---	
	willow oak	---	---	
	blackgum	---	---	
	American holly	---	---	
MakAt:				
Manahawkin, frequently flooded	Atlantic white cedar	50	92	Atlantic white cedar, red maple
	red maple	75	43	
MamnAv:				
Mannington, very frequently flooded	---	---	---	---
Nanticoke, very frequently flooded	---	---	---	---
MamuAv:				
Mannington, very frequently flooded	---	---	---	---
Nanticoke, very frequently flooded	---	---	---	---
Udorthents	---	---	---	---
MaoB:				
Marlton	yellow-poplar	90	86	yellow-poplar, eastern white pine, sweetgum, northern red oak
	sweetgum	80	86	
	northern red oak	---	---	
	American beech	---	---	
	American holly	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
MaoC:				
Marlton-----------------	yellow-poplar-------	90	86	yellow-poplar, eastern white pine, sweetgum, northern red oak
	sweetgum-----------	80	86	
	northern red oak----	---	---	
	American beech------	---	---	
	American holly------	---	---	
MaoC2:				
Marlton, eroded---------	yellow-poplar-------	85	---	shortleaf pine, eastern white pine, black oak
	sweetgum-----------	75	---	
	northern red oak----	---	---	
	American beech------	---	---	
	American holly------	---	---	
MaoD:				
Marlton-----------------	yellow-poplar-------	90	86	yellow-poplar, eastern white pine, sweetgum, northern red oak
	sweetgum-----------	80	86	
	northern red oak----	---	---	
	American beech------	---	---	
	American holly------	---	---	
MaoD2:				
Marlton, eroded---------	yellow-poplar-------	85	---	shortleaf pine, eastern white pine, black oak
	sweetgum-----------	75	---	
	northern red oak----	---	---	
	American beech------	---	---	
	American holly------	---	---	
MauB:				
Marlton-----------------	yellow-poplar-------	90	86	willow oak, sugar maple, eastern white pine, yellow-poplar, American sycamore, flowering crabapple, flowering dogwood
	sweetgum-----------	80	86	
	northern red oak----	---	---	
	American beech------	---	---	
	American holly------	---	---	
Urban land--------------	---	---	---	---
MumA:				
Mullica-----------------	sweetgum-----------	90	100	sweetgum, yellow-poplar, red maple, Atlantic white cedar
	red maple-----------	---	---	
	blackgum-----------	---	---	
	pitch pine----------	---	---	
OTKA:				
Othello-----------------	sweetgum-----------	80	86	sweetgum, yellow-poplar, red maple
	red maple-----------	50	29	
	blackgum-----------	---	---	
Fallsington-------------	sweetgum-----------	80	86	sweetgum, yellow-poplar, red maple
	blackgum-----------	---	---	
	red maple-----------	---	---	
PEEAR:				
Pedricktown, rarely flooded----------------	sweetgum-----------	80	86	sweetgum, yellow-poplar, red maple
	red maple-----------	---	---	
	blackgum-----------	---	---	
	black willow--------	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
PEEAR:				
Askecksy, rarely flooded	sweetgum-----------	80	86	sweetgum, yellow-poplar, red maple
	blackgum-----------	---	---	
	red maple----------	---	---	
	yellow-poplar-------	---	---	
Mullica, rarely flooded-	sweetgum-----------	90	100	sweetgum, yellow-poplar, red maple, Atlantic white cedar
	red maple----------	---	---	
	blackgum-----------	---	---	
	pitch pine----------	---	---	
PHG:				
Pits, sand and gravel---	---	---	---	---
SabB:				
Sassafras---------------	black oak----------	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	70	57	
	yellow-poplar-------	80	72	
SabC:				
Sassafras---------------	black oak----------	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	70	57	
	yellow-poplar-------	80	72	
SabD:				
Sassafras---------------	black oak----------	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	70	57	
	yellow-poplar-------	80	72	
SabF:				
Sassafras---------------	black oak----------	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	57	
	scarlet oak---------	70	57	
	northern red oak----	70	57	
	yellow-poplar-------	80	72	
SacA:				
Sassafras---------------	black oak----------	70	52	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	52	
	scarlet oak---------	70	52	
	northern red oak----	70	52	
	yellow-poplar-------	80	72	
SacB:				
Sassafras---------------	black oak----------	70	52	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	52	
	scarlet oak---------	70	52	
	northern red oak----	70	52	
	yellow-poplar-------	80	71	
SacC:				
Sassafras---------------	black oak----------	70	52	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak----------	70	52	
	scarlet oak---------	70	52	
	northern red oak----	70	52	
	yellow-poplar-------	80	71	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
SacD:				
Sassafras	black oak	70	57	shortleaf pine, eastern white pine, northern red oak, yellow-poplar
	white oak	70	57	
	scarlet oak	70	57	
	northern red oak	70	57	
	yellow-poplar	80	72	
SapB:				
Sassafras	black oak	70	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	white oak	70	57	
	scarlet oak	70	57	
	northern red oak	70	57	
	yellow-poplar	80	72	
Urban land	---	---	---	---
ThfB:				
Tinton	black oak	60	52	eastern white pine
	white oak	60	52	
	scarlet oak	60	52	
	chestnut oak	60	52	
UdauB:				
Udorthents	---	---	---	---
Urban land	---	---	---	---
UddB:				
Udorthents, dredged materials	---	---	---	---
UddcB:				
Udorthents, dredged coarse materials	---	---	---	---
UddfB:				
Udorthents, dredged fine materials	---	---	---	---
UddrB:				
Udorthents, dredged materials	---	---	---	---
Urban land	---	---	---	---
UdrB:				
Udorthents, refuse substratum	---	---	---	---
UR:				
Urban land	---	---	---	---
USAURB:				
Urban land	---	---	---	---

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
USAURB:				
Aura	white oak	---	---	pin oak, hickory, scarlet oak, eastern white pine, flowering crabapple, flowering dogwood, holly
	pin oak	---	---	
	eastern white pine	---	---	
	sugar maple	---	---	
	flowering dogwood	---	---	
USDOWB:				
Urban land	---	---	---	---
Downer	white oak	---	---	pin oak, scarlet oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood, holly
	pin oak	---	---	
	eastern white pine	---	---	
	sugar maple	---	---	
	flowering dogwood	---	---	
USFREB:				
Urban land	---	---	---	---
Freehold	white oak	---	---	pin oak, willow oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood, holly
	pin oak	---	---	
	eastern white pine	---	---	
	sugar maple	---	---	
	flowering dogwood	---	---	
USSASB:				
Urban land	---	---	---	---
Sassafras	white oak	---	---	pin oak, willow oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood, holly
	pin oak	---	---	
	eastern white pine	---	---	
	sugar maple	---	---	
	flowering dogwood	---	---	
USWESB:				
Urban land	---	---	---	---
Westphalia	white oak	---	---	pin oak, scarlet oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood, holly
	pin oak	---	---	
	eastern white pine	---	---	
	sugar maple	---	---	
	flowering dogwood	---	---	
WeeB:				
Westphalia	black oak	70	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
WeeC:				
Westphalia	black oak	70	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
WeeD:				
Westphalia	black oak	70	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
WeeD2:				
Westphalia, eroded	black oak	70	57	shortleaf pine, eastern white pine, black oak
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
WeeF:				
Westphalia	black oak	70	57	shortleaf pine, eastern white pine, black oak, yellow-poplar
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
WehB:				
Westphalia	black oak	70	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
Urban land	---	---	---	---
WehC:				
Westphalia	black oak	70	57	shortleaf pine, pin oak, northern red oak, sugar maple, eastern white pine, yellow-poplar, flowering crabapple, flowering dogwood
	yellow-poplar	80	72	
	white oak	---	---	
	northern red oak	---	---	
Urban land	---	---	---	---
WoeA:				
Woodstown	sweetgum	90	100	northern red oak, yellow-poplar, eastern white pine, sweetgum
	yellow-poplar	90	86	
	white oak	80	57	
	northern red oak	---	---	
WoeB:				
Woodstown	sweetgum	90	100	northern red oak, yellow-poplar, eastern white pine, sweetgum
	yellow-poplar	90	86	
	white oak	80	57	
	northern red oak	---	---	

Table 9.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
WokA:				
Woodstown	sweetgum	90	100	northern red oak, yellow-poplar, eastern white pine, sweetgum
	yellow-poplar	90	86	
	white oak	80	57	
	northern red oak	---	---	
Glassboro	sweetgum	90	100	yellow-poplar, eastern white pine, sweetgum, willow oak
	yellow-poplar	90	86	
	white oak	80	57	
	red maple	---	0	
	northern red oak	---	0	
WooB:				
Woodstown	sweetgum	90	100	willow oak, sugar maple, eastern white pine, yellow-poplar, American sycamore, flowering crabapple, flowering dogwood
	yellow-poplar	90	86	
	white oak	80	57	
	northern red oak	---	---	
Urban land	---	---	---	---

Table 10a.--Recreational Development (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
AtsA:							
Atsion	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Too sandy	1.00	Depth to saturated zone	1.00	Too sandy	1.00
AtsAr:							
Atsion, rarely flooded	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too sandy	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00				
AucB:							
Aura	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
AugA:							
Aura	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Gravel content	0.32
						Slow water movement	0.21
AugB:							
Aura	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Gravel content	0.32
						Slow water movement	0.21
						Slope	0.12
AugC:							
Aura	90	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.21	Slow water movement	0.21	Slope	1.00
						Gravel content	0.32
						Slow water movement	0.21
AupB:							
Aura	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
						Slope	0.12
AvsB:							
Aura	65	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
						Slope	0.12
Sassafras	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
AvsC:							
Aura----------------	65	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
		Slow water movement	0.21	Slow water movement	0.21	Too sandy	0.50
						Slow water movement	0.21
Sassafras-----------	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
						Too sandy	0.50
AvtB:							
Aura----------------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Gravel content	0.32
						Slow water movement	0.21
						Slope	0.12
Sassafras-----------	30	Not limited		Not limited		Somewhat limited	
						Gravel content	0.32
						Slope	0.12
AvtC:							
Aura----------------	65	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.21	Slow water movement	0.21	Slope	1.00
						Gravel content	0.32
						Slow water movement	0.21
Sassafras-----------	30	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.32
AvtC2:							
Aura, eroded--------	65	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.21	Slow water movement	0.21	Slope	1.00
						Gravel content	0.32
						Slow water movement	0.21
Sassafras, eroded---	30	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.32
AvuB:							
Aura----------------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Gravel content	0.32
						Slow water movement	0.21
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
AvuC:							
Aura----------------	60	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.21	Slow water movement	0.21	Slope	1.00
						Gravel content	0.32
						Slow water movement	0.21
Urban land----------	30	Not rated		Not rated		Not rated	

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
BerAr:							
Berryland, rarely flooded-----------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too sandy	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00				
BEXAS:							
Berryland, occasionally flooded-----------	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too sandy	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00			Flooding	0.60
Mullica, occasionally flooded-----------	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00			Flooding	0.60
BumA:							
Buddtown------------	65	Not limited		Not limited		Not limited	
Deptford------------	30	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94	Depth to saturated zone	1.00
BuuB:							
Buddtown------------	65	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	25	Not rated		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded-----------	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.40	Ponding	1.00
CoeAs:							
Colemantown, occasionally flooded-----------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Slow water movement	0.96	Slow water movement	0.96
		Slow water movement	0.96			Flooding	0.60
CogB:							
Collington----------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
CogC:							
Collington----------	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
						Too sandy	0.50
CokA:							
Collington----------	85	Not limited		Not limited		Not limited	
CokB:							
Collington----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
CokC:							
Collington----------	90	Not limited		Not limited		Very limited	
						Slope	1.00
CopB:							
Collington----------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
CosB:							
Colts Neck----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
CosC:							
Colts Neck----------	90	Not limited		Not limited		Very limited	
						Slope	1.00
DocB:							
Downer--------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12
DocC:							
Downer--------------	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
						Too sandy	0.50
DoeA:							
Downer--------------	85	Not limited		Not limited		Not limited	
DoeB:							
Downer--------------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
DouB:							
Downer--------------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
EveB:							
Evesboro------------	80	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
EveC:							
Evesboro------------	95	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	1.00

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
EveE:							
Evesboro------------	95	Very limited		Very limited		Very limited	
		Slope	1.00	Too sandy	1.00	Slope	1.00
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
EvuB:							
Evesboro------------	60	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FapA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FauB:							
Fallsington---------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land----------	20	Not rated		Not rated		Not rated	
FmhAt:							
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.40	Ponding	1.00
FrfB:							
Freehold------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12
FrfC:							
Freehold------------	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
						Too sandy	0.50
FrkA:							
Freehold------------	90	Not limited		Not limited		Not limited	
FrkB:							
Freehold------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
FrkC:							
Freehold------------	90	Not limited		Not limited		Very limited	
						Slope	1.00
FrkD:							
Freehold------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
FrkD2:							
Freehold, eroded----	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
FrkE:							
Freehold-----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
FrkF:							
Freehold-----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
FrrB:							
Freehold-----------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold-----------	60	Not limited		Not limited		Very limited	
						Slope	1.00
Urban land----------	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton-----------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12
HbrB:							
Hammonton-----------	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12
Urban land----------	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
JduA:							
Jade Run------------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land----------	15	Not rated		Not rated		Not rated	
KemB:							
Keyport-------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.12
KemC2:							
Keyport, eroded-----	95	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
						Slow water movement	0.96

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
KeoA:							
Keyport	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
KeuB:							
Keyport	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.12
Urban land	20	Not rated		Not rated		Not rated	
KreA:							
Kresson	85	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	0.96	Depth to saturated zone	1.00
		Slow water movement	0.96	Depth to saturated zone	0.94	Slow water movement	0.96
						Gravel content	0.32
LakB:							
Lakehurst	85	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
LasB:							
Lakewood	85	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
LatvB:							
Lakewood	65	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
Quakerbridge	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
LenA:							
Lenni	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
MakAt:							
Manahawkin, frequently flooded	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Organic matter content	1.00
		Ponding	1.00	Organic matter content	1.00	Flooding	1.00
		Organic matter content	1.00	Flooding	0.40	Ponding	1.00

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
MamnAv:							
Mannington, very frequently flooded-	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.60	Ponding	1.00
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
Nanticoke, very frequently flooded-	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.60	Ponding	1.00
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
MamuAv:							
Mannington, very frequently flooded-	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.60	Ponding	1.00
Nanticoke, very frequently flooded-	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.60	Ponding	1.00
Udorthents----------	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
MaoB:							
Marlton-------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.12
MaoC:							
Marlton-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
						Slow water movement	0.96
MaoC2:							
Marlton, eroded-----	95	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
						Slow water movement	0.96
MaoD:							
Marlton-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.63	Slope	0.63	Slow water movement	0.96

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
MaoD2:							
Marlton, eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.63	Slope	0.63	Slow water movement	0.96
MauB:							
Marlton	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.12
Urban land	35	Not rated		Not rated		Not rated	
MumA:							
Mullica	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
OTKA:							
Othello	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Fallsington	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
PEEAR:							
Pedricktown, rarely flooded	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00				
Askecksy, rarely flooded	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Too sandy	0.50	Too sandy	0.50
		Too sandy	0.50				
Mullica, rarely flooded	20	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00				
PHG:							
Pits, sand and gravel	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
						Slope	0.12

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
SabC:							
Sassafras-----------	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Slope	1.00
						Too sandy	0.50
SabD:							
Sassafras-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
SabF:							
Sassafras-----------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.50	Too sandy	0.50	Too sandy	0.50
SacA:							
Sassafras-----------	80	Not limited		Not limited		Not limited	
SacB:							
Sassafras-----------	80	Not limited		Not limited		Somewhat limited	
						Slope	0.12
SacC:							
Sassafras-----------	90	Not limited		Not limited		Very limited	
						Slope	1.00
SacD:							
Sassafras-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
SapB:							
Sassafras-----------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
ThfB:							
Tinton--------------	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	0.12
UdauB:							
Udorthents----------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
Urban land----------	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredged materials----------	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
UddcB:							
Udorthents, dredged coarse materials---	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
UddfB:							
Udorthents, dredged fine materials-----	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
UddrB:							
Udorthents, dredged materials----------	65	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
Urban land----------	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum---------	100	Not limited		Not limited		Somewhat limited	
						Slope	0.50
UR:							
Urban land----------	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Aura----------------	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Gravel content	0.32
						Slow water movement	0.21
						Slope	0.12
USDOWB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Downer--------------	15	Not limited		Not limited		Somewhat limited	
						Slope	0.12
USFREB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Freehold------------	20	Not limited		Not limited		Somewhat limited	
						Slope	0.12
USSASB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Sassafras-----------	15	Not limited		Not limited		Somewhat limited	
						Slope	0.12
USWESB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Westphalia----------	15	Not limited		Not limited		Somewhat limited	
						Slope	0.12
WeeB:							
Westphalia----------	80	Not limited		Not limited		Somewhat limited	
						Slope	0.12

Table 10a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
WeeC:							
Westphalia----------	90	Not limited		Not limited		Very limited	
						Slope	1.00
WeeD:							
Westphalia----------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
WeeD2:							
Westphalia, eroded--	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
WeeF:							
Westphalia----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
WehB:							
Westphalia----------	55	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia----------	60	Not limited		Not limited		Very limited	
						Slope	1.00
Urban land----------	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Not limited		Not limited		Not limited	
WoeB:							
Woodstown-----------	80	Not limited		Not limited		Somewhat limited	
						Slope	0.12
WokA:							
Woodstown-----------	70	Not limited		Not limited		Not limited	
Glassboro-----------	15	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94	Depth to saturated zone	1.00
WooB:							
Woodstown-----------	65	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Urban land----------	20	Not rated		Not rated		Not rated	

Table 10b.--Recreational Development (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AtsA:							
Atsion	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too sandy	1.00	Too sandy	1.00	Droughty	0.80
AtsAr:							
Atsion, rarely flooded	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Droughty	0.80
AucB:							
Aura	90	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
AugA:							
Aura	80	Not limited		Not limited		Not limited	
AugB:							
Aura	85	Not limited		Not limited		Not limited	
AugC:							
Aura	90	Not limited		Not limited		Not limited	
AupB:							
Aura	85	Not limited		Not limited		Not limited	
AvsB:							
Aura	65	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
Sassafras	30	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
AvsC:							
Aura	65	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
Sassafras	30	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
AvtB:							
Aura	60	Not limited		Not limited		Not limited	
Sassafras	30	Not limited		Not limited		Not limited	
AvtC:							
Aura	65	Not limited		Not limited		Not limited	
Sassafras	30	Not limited		Not limited		Not limited	
AvtC2:							
Aura, eroded	65	Not limited		Not limited		Not limited	

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
AvtC2:							
Sassafras, eroded---	30	Not limited		Not limited		Not limited	
AvuB:							
Aura----------------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
AvuC:							
Aura----------------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded------------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Droughty	0.98
						Too sandy	0.50
BEXAS:							
Berryland, occasionally flooded------------	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Droughty	0.98
						Flooding	0.60
						Too sandy	0.50
Mullica, occasionally flooded------------	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
						Flooding	0.60
BumA:							
Buddtown------------	65	Not limited		Not limited		Not limited	
Deptford------------	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.94
BuuB:							
Buddtown------------	65	Not limited		Not limited		Not limited	
Urban land----------	25	Not rated		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded------------	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
CoeAs:							
Colemantown, occasionally flooded	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
						Flooding	0.60
CogB:							
Collington	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
CogC:							
Collington	90	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
CokA:							
Collington	85	Not limited		Not limited		Not limited	
CokB:							
Collington	90	Not limited		Not limited		Not limited	
CokC:							
Collington	90	Not limited		Not limited		Not limited	
CopB:							
Collington	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
CosB:							
Colts Neck	90	Not limited		Not limited		Somewhat limited	
						Large stones content	0.01
CosC:							
Colts Neck	90	Not limited		Not limited		Somewhat limited	
						Large stones content	0.01
DocB:							
Downer	80	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
DocC:							
Downer	90	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
DoeA:							
Downer	85	Not limited		Not limited		Not limited	
DoeB:							
Downer	90	Not limited		Not limited		Not limited	
DouB:							
Downer	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
EveB:							
Evesboro------------	80	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.69
						Too sandy	0.50
EveC:							
Evesboro------------	95	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.69
						Too sandy	0.50
EveE:							
Evesboro------------	95	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
		Slope	0.50			Droughty	0.69
						Too sandy	0.50
EvuB:							
Evesboro------------	60	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.69
						Too sandy	0.50
Urban land----------	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FapA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FauB:							
Fallsington---------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land----------	20	Not rated		Not rated		Not rated	
FmhAt:							
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
FrfB:							
Freehold------------	80	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
FrfC:							
Freehold------------	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
FrkA:							
Freehold------------	90	Not limited		Not limited		Not limited	
FrkB:							
Freehold------------	85	Not limited		Not limited		Not limited	

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
FrkC:							
Freehold	90	Not limited		Not limited		Not limited	
FrkD:							
Freehold	90	Not limited		Not limited		Somewhat limited	
						Slope	0.84
FrkD2:							
Freehold, eroded	90	Not limited		Not limited		Somewhat limited	
						Slope	0.84
FrkE:							
Freehold	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
FrkF:							
Freehold	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
FrrB:							
Freehold	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton	80	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
HbrB:							
Hammonton	70	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
Urban land	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
JduA:							
Jade Run	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land	15	Not rated		Not rated		Not rated	
KemB:							
Keyport	85	Not limited		Not limited		Not limited	
KemC2:							
Keyport, eroded	95	Not limited		Not limited		Not limited	
KeoA:							
Keyport	80	Not limited		Not limited		Not limited	
KeuB:							
Keyport	70	Not limited		Not limited		Not limited	

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
KeuB:							
Urban land	20	Not rated		Not rated		Not rated	
KreA:							
Kresson	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.94
LakB:							
Lakehurst	85	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.22
LasB:							
Lakewood	85	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.69
						Too sandy	0.50
LatvB:							
Lakewood	65	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.69
						Too sandy	0.50
Quakerbridge	30	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.22
LenA:							
Lenni	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
MakAt:							
Manahawkin, frequently flooded	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Organic matter content	1.00	Organic matter content	1.00	Flooding	1.00
		Ponding	1.00	Ponding	1.00	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
MamnAv:							
Mannington, very frequently flooded	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
Nanticoke, very frequently flooded	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
MamuAv:							
Mannington, very frequently flooded	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
MamuAv:							
Nanticoke, very frequently flooded-	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
Udorthents----------	20	Not limited		Not limited		Not limited	
MaoB:							
Marlton-------------	80	Not limited		Not limited		Not limited	
MaoC:							
Marlton-------------	90	Not limited		Not limited		Not limited	
MaoC2:							
Marlton, eroded-----	95	Not limited		Not limited		Not limited	
MaoD:							
Marlton-------------	90	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.63
MaoD2:							
Marlton, eroded-----	90	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.63
MauB:							
Marlton-------------	55	Not limited		Not limited		Not limited	
Urban land----------	35	Not rated		Not rated		Not rated	
MumA:							
Mullica-------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
OTKA:							
Othello-------------	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Fallsington---------	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
PEEAR:							
Pedricktown, rarely flooded-----------	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Askecksy, rarely flooded-----------	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Too sandy	0.50	Too sandy	0.50	Droughty	0.90

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
PEEAR:							
Mullica, rarely flooded	20	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
PHG:							
Pits, sand and gravel	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
SabC:							
Sassafras	90	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.50	Too sandy	0.50		
SabD:							
Sassafras	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.50	Too sandy	0.50	Slope	0.63
SabF:							
Sassafras	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.50	Slope	1.00
		Too sandy	0.50				
SacA:							
Sassafras	80	Not limited		Not limited		Not limited	
SacB:							
Sassafras	80	Not limited		Not limited		Not limited	
SacC:							
Sassafras	90	Not limited		Not limited		Not limited	
SacD:							
Sassafras	85	Not limited		Not limited		Somewhat limited	
						Slope	0.63
SapB:							
Sassafras	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
ThfB:							
Tinton	90	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
						Droughty	0.27
UdauB:							
Udorthents	60	Not limited		Not limited		Somewhat limited	
						Droughty	0.01
Urban land	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredged materials	95	Not limited		Not limited		Somewhat limited	
						Droughty	0.01

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
UddcB:							
Udorthents, dredged coarse materials---	90	Not limited		Not limited		Somewhat limited	
						Droughty	0.01
UddfB:							
Udorthents, dredged fine materials-----	90	Not limited		Not limited		Not limited	
UddrB:							
Udorthents, dredged materials----------	65	Not limited		Not limited		Somewhat limited	
						Droughty	0.01
Urban land----------	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum---------	100	Not limited		Not limited		Not limited	
UR:							
Urban land----------	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Aura----------------	15	Not limited		Not limited		Not limited	
USDOWB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Downer--------------	15	Not limited		Not limited		Not limited	
USFREB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Freehold------------	20	Not limited		Not limited		Not limited	
USSASB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Sassafras-----------	15	Not limited		Not limited		Not limited	
USWESB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Westphalia----------	15	Not limited		Not limited		Not limited	
WeeB:							
Westphalia----------	80	Not limited		Not limited		Not limited	
WeeC:							
Westphalia----------	90	Not limited		Not limited		Not limited	
WeeD:							
Westphalia----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.63
WeeD2:							
Westphalia, eroded--	90	Not limited		Not limited		Somewhat limited	
						Slope	0.63

Table 10b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf fairways: Rating class and limiting features	Golf fairways: Value
WeeF:							
Westphalia----------	85	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
WehB:							
Westphalia----------	55	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia----------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Not limited		Not limited		Not limited	
WoeB:							
Woodstown-----------	80	Not limited		Not limited		Not limited	
WokA:							
Woodstown-----------	70	Not limited		Not limited		Not limited	
Glassboro-----------	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.94
WooB:							
Woodstown-----------	65	Not limited		Not limited		Not limited	
Urban land----------	20	Not rated		Not rated		Not rated	

Table 11.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
AtsA:											
Atsion	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair
AtsAr:											
Atsion, rarely flooded	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair
AucB:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
AugA:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
AugB:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
AugC:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
AupB:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
AvsB:											
Aura	Poor	Fair	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Sassafras	Poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor
AvsC:											
Aura	Poor	Fair	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Sassafras	Poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
AvtB:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Sassafras	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
AvtC:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Sassafras	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
AvtC2:											
Aura, eroded	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Sassafras, eroded	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
AvuB:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
AvuC:											
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
BerAr:											
Berryland, rarely flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
BEXAS:											
Berryland, occasionally flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Mullica, occasionally flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
BumA:											
Buddtown	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Deptford	Fair	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
BuuB:											
Buddtown	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
ChsAt:											
Chicone, frequently flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Fair	Good
CoeAs:											
Colemantown, occasionally flooded	Poor	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
CogB:											
Collington	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CogC:											
Collington	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
CokA:											
Collington	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CokB:											
Collington	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CokC:											
Collington	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
CopB:											
Collington	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
CosB:											
Colts Neck	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CosC:											
Colts Neck	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
DocB:											
Downer	Poor	Fair	Good	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor
DocC:											
Downer	Poor	Fair	Good	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor
DoeA:											
Downer	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
DoeB:											
Downer	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
DouB:											
Downer	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
EveB:											
Evesboro	Poor	Poor	Poor	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
EveC:											
Evesboro	Poor	Poor	Poor	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
EveE:											
Evesboro	Very poor	Very poor	Poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
EvuB:											
Evesboro----------------	Poor	Poor	Poor	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Urban land--------------	---	---	---	---	---	---	---	---	---	---	---
FamA:											
Fallsington-------------	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
FapA:											
Fallsington-------------	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
FauB:											
Fallsington-------------	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Urban land--------------	---	---	---	---	---	---	---	---	---	---	---
FmhAt:											
Fluvaquents, loamy, frequently flooded-----	Fair	Good	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor
FrfB:											
Freehold----------------	Poor	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
FrfC:											
Freehold----------------	Poor	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
FrkA:											
Freehold----------------	Good	Good	Fair	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
FrkB:											
Freehold----------------	Good	Good	Fair	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
FrkC:											
Freehold----------------	Fair	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
FrkD:											
Freehold----------------	Fair	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life
FrkD2:											
Freehold, eroded	Fair	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
FrkE:											
Freehold	Poor	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
FrkF:											
Freehold	Very poor	Poor	Fair	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
FrrB:											
Freehold	Good	Good	Fair	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
FrrC:											
Freehold	Fair	Fair	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
HbmB:											
Hammonton	Poor	Fair	Good	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
HbrB:											
Hammonton	Poor	Fair	Good	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
JdrA:											
Jade Run	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
JduA:											
Jade Run	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Urban land	---	---	---	---	---	---	---	---	---	---	---
KemB:											
Keyport	Fair	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
KemC2:											
Keyport, eroded	Fair	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
KeoA:											
Keyport	Fair	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
KeuB:											
Keyport	Fair	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
KreA:											
Kresson	Fair	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
LakB:											
Lakehurst	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Fair	Poor	Poor	Poor
LasB:											
Lakewood	Poor	Poor	Fair	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
LatvB:											
Lakewood	Poor	Poor	Fair	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Quakerbridge	Poor	Poor	Fair	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
LenA:											
Lenni	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
MakAt:											
Manahawkin, frequently flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Fair
MamnAv:											
Mannington, very frequently flooded	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Nanticoke, very frequently flooded	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
MamuAv:											
Mannington, very frequently flooded-----	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Nanticoke, very frequently flooded-----	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Udorthents--------------	---	---	---	---	---	---	---	---	---	---	---
MaoB:											
Marlton-----------------	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MaoC:											
Marlton-----------------	Fair	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MaoC2:											
Marlton, eroded---------	Fair	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MaoD:											
Marlton-----------------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MaoD2:											
Marlton, eroded---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MauB:											
Marlton-----------------	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land--------------	---	---	---	---	---	---	---	---	---	---	---
MumA:											
Mullica-----------------	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
OTKA:											
Othello-----------------	Poor	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Fallsington-------------	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
PEEAR:											
Pedricktown, rarely flooded	Fair	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Askecksy, rarely flooded	Poor	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair
Mullica, rarely flooded	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
PHG:											
Pits, sand and gravel	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
SabB:											
Sassafras	Poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor
SabC:											
Sassafras	Poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor
SabD:											
Sassafras	Poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor
SabF:											
Sassafras	Very poor	Fair	Good	Good	Poor	Good	Very poor	Very poor	Fair	Good	Very poor
SacA:											
Sassafras	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
SacB:											
Sassafras	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
SacC:											
Sassafras	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
SacD:											
Sassafras	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
SapB:											
Sassafras	Fair	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
ThfB:											
Tinton	Fair	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
UdauB:											
Udorthents	---	---	---	---	---	---	---	---	---	---	---
Urban land	---	---	---	---	---	---	---	---	---	---	---
UddB:											
Udorthents, dredged materials	---	---	---	---	---	---	---	---	---	---	---
UddcB:											
Udorthents, dredged coarse materials	---	---	---	---	---	---	---	---	---	---	---
UddfB:											
Udorthents, dredged fine materials	---	---	---	---	---	---	---	---	---	---	---
UddrB:											
Udorthents, dredged materials	---	---	---	---	---	---	---	---	---	---	---
Urban land	---	---	---	---	---	---	---	---	---	---	---
UdrB:											
Udorthents, refuse substratum	---	---	---	---	---	---	---	---	---	---	---
UR:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
USAURB:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
Aura	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Good	Fair	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
USDOWB:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
Downer	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
USFREB:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
Freehold	Good	Good	Fair	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
USSASB:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
Sassafras	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
USWESB:											
Urban land	---	---	---	---	---	---	---	---	---	---	---
Westphalia	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
WeeB:											
Westphalia	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
WeeC:											
Westphalia	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
WeeD:											
Westphalia	Fair	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
WeeD2:											
Westphalia, eroded	Fair	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
WeeF:											
Westphalia	Very poor	Poor	Good	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
WehB:											
Westphalia	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
WehC:											
Westphalia	Good	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---
WoeA:											
Woodstown	Fair	Good	Good	Good	Poor	Good	Poor	Poor	Good	Good	Poor
WoeB:											
Woodstown	Fair	Good	Good	Good	Poor	Good	Poor	Very poor	Good	Good	Very poor
WokA:											
Woodstown	Fair	Good	Good	Good	Poor	Good	Poor	Poor	Good	Good	Very poor
Glassboro	Fair	Good	Good	Good	Fair	Good	Fair	Poor	Good	Good	Fair
WooB:											
Woodstown	Fair	Good	Good	Good	Poor	Good	Poor	Very poor	Good	Good	Very poor
Urban land	---	---	---	---	---	---	---	---	---	---	---

Table 12.--Hydric Soils

(This report lists all map unit components for the survey area. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of this table.)

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
AtsA: Atsion sand, 0 to 2 percent slopes	Atsion	90	Flats	Yes	2B3
	Berryland, occasionally flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Lakehurst	5	Flats, low hills	No	---
AtsAr: Atsion sand, 0 to 2 percent slopes, rarely flooded	Atsion, rarely flooded	85	Flats	Yes	2B3
	Berryland, occasionally flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Lakehurst	5	Flats	No	---
	Manahawkin, frequently flooded	5	Flood plains	Yes	1, 3
AucB: Aura loamy sand, 0 to 5 percent slopes	Aura	90	Low hills	No	---
	Sassafras	5	Knolls	No	---
	Woodstown	5	Drainageways	No	---
AugA: Aura sandy loam, 0 to 2 percent slopes	Aura	80	Low hills	No	---
	Downer	5	Low hills	No	---
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3
	Sassafras	5	Knolls	No	---
	Woodstown	5	Drainageways	No	---
AugB: Aura sandy loam, 2 to 5 percent slopes	Aura	85	Low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
	Woodstown	5	Drainageways	No	---
AugC: Aura sandy loam, 5 to 10 percent slopes	Aura	90	Low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
AupB: Aura loam, 2 to 5 percent slopes	Aura	85	Low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
	Woodstown	5	Drainageways	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
AvsB---------------------------- Aura-Sassafras loamy sands, 0 to 5 percent slopes	Aura	65	Low hills	No	---
	Sassafras	30	Knolls	No	---
	Downer	5	Low hills	No	---
AvsC---------------------------- Aura-Sassafras loamy sands, 5 to 10 percent slopes	Aura	65	Low hills	No	---
	Sassafras	30	Knolls	No	---
	Downer	5	Low hills	No	---
AvtB---------------------------- Aura-Sassafras sandy loams, 2 to 5 percent slopes	Aura	60	Low hills	No	---
	Sassafras	30	Knolls	No	---
	Downer	5	Low hills	No	---
	Woodstown	5	Drainageways	No	---
AvtC---------------------------- Aura-Sassafras sandy loams, 5 to 10 percent slopes	Aura	65	Low hills	No	---
	Sassafras	30	Knolls	No	---
	Downer	5	Low hills	No	---
AvtC2--------------------------- Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded	Aura, eroded	65	Low hills	No	---
	Sassafras, eroded	30	Knolls	No	---
	Downer	5	Low hills	No	---
AvuB---------------------------- Aura-Urban land complex, 0 to 5 percent slopes	Aura	60	Low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
AvuC---------------------------- Aura-Urban land complex, 5 to 10 percent slopes	Aura	60	Low hills	No	---
	Urban land	30	Low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
BerAr--------------------------- Berryland sand, 0 to 2 percent slopes, rarely flooded	Berryland, rarely flooded	85	Depressions, drainageways, flats	Yes	2B3, 3
	Atsion	5	Flats	Yes	2B3
	Manahawkin, frequently flooded	5	Flood plains, swamps	Yes	1, 3
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
BEXAS---------------------------- Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded	Berryland, occasionally flooded	50	Depressions, drainageways, flats	Yes	2B3, 3
	Mullica, occasionally flooded	40	Depressions, drainageways, flood plains	Yes	2B3
	Atsion	5	Flats	Yes	2B3
	Manahawkin, frequently flooded	5	Flood plains	Yes	1, 3
BumA----------------------------- Buddtown-Deptford complex, 0 to 2 percent slopes	Buddtown	65	Flats	No	---
	Deptford	30	Flats	No	---
	Jade Run	5	Depressions, flats	Yes	2B3
BuuB----------------------------- Buddtown-Urban land complex, 0 to 5 percent slopes	Buddtown	65	Flats	No	---
	Urban land	25	Knolls	No	---
	Deptford	5	Flats	No	---
	Jade Run	5	Depressions, flats	Yes	2B3
ChsAt---------------------------- Chicone silt loam, 0 to 1 percent slopes, frequently flooded	Chicone, frequently flooded	95	Flood plains	Yes	2B3
	Manahawkin, frequently flooded	5	Flood plains	Yes	1, 3
CoeAs---------------------------- Colemantown loam, 0 to 2 percent slopes, occasionally flooded	Colemantown, occasionally flooded	90	Depressions, drainageways, flats	Yes	2B3, 3
	Kresson	5	Low hills	No	---
	Marlton	5	Knolls	No	---
CogB----------------------------- Collington loamy sand, 0 to 5 percent slopes	Collington	85	Low hills	No	---
	Freehold	5	Low hills	No	---
	Marlton	5	Flats	No	---
	Tinton	5	Knolls	No	---
CogC----------------------------- Collington loamy sand, 5 to 10 percent slopes	Collington	90	Low hills	No	---
	Freehold	5	Low hills	No	---
	Tinton	5	Knolls	No	---
CokA----------------------------- Collington sandy loam, 0 to 2 percent slopes	Collington	85	Interfluves, low hills	No	---
	Buddtown	5	Depressions	No	---
	Freehold	5	Low hills	No	---
	Marlton	5	Flats	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
CokB----------------------------- Collington sandy loam, 2 to 5 percent slopes	Collington	90	Low hills	No	---
	Freehold	5	Knolls, low hills	No	---
	Marlton	5	Flats, knolls	No	---
CokC----------------------------- Collington sandy loam, 5 to 10 percent slopes	Collington	90	Hillslopes, knobs	No	---
	Freehold	10	Low hills	No	---
CopB----------------------------- Collington-Urban land complex, 0 to 5 percent slopes	Collington	60	Low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Freehold	5	Low hills	No	---
	Marlton	5	Flats	No	---
CosB----------------------------- Colts Neck sandy loam, 2 to 5 percent slopes	Colts Neck	90	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Freehold	5	Knolls, low hills	No	---
CosC----------------------------- Colts Neck sandy loam, 5 to 10 percent slopes	Colts Neck	90	Knolls, low hills	No	---
	Collington	5	Hillslopes, knolls	No	---
	Freehold	5	Knolls, low hills	No	---
DocB----------------------------- Downer loamy sand, 0 to 5 percent slopes	Downer	80	Knolls, low hills	No	---
	Atsion	5	Flats	Yes	2B3
	Evesboro	5	Dunes, low hills	No	---
	Hammonton	5	Depressions, flats	No	---
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3
DocC----------------------------- Downer loamy sand, 5 to 10 percent slopes	Downer	90	Knolls, low hills	No	---
	Evesboro	5	Dunes, low hills	No	---
	Sassafras	5	Knolls, low hills	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
DoeA----------------------------- Downer sandy loam, 0 to 2 percent slopes	Downer	85	Knolls, low hills	No	---
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3
	Sassafras	5	Knolls, low hills	No	---
	Woodstown	5	Drainageways, flats	No	---
DoeB----------------------------- Downer sandy loam, 2 to 5 percent slopes	Downer	90	Knolls, low hills	No	---
	Sassafras	5	Knolls, low hills	No	---
	Woodstown	5	Drainageways, flats	No	---
DouB----------------------------- Downer-Urban land complex, 0 to 5 percent slopes	Downer	60	Knolls, low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Sassafras	5	Knolls, low hills	No	---
	Woodstown	5	Drainageways, flats	No	---
EveB----------------------------- Evesboro sand, 0 to 5 percent slopes	Evesboro	80	Low hills	No	---
	Atsion	5	Flats	Yes	2B3
	Downer	5	Knolls, low hills	No	---
	Lakehurst	5	Depressions, flats	No	---
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3
EveC----------------------------- Evesboro sand, 5 to 10 percent slopes	Evesboro	95	Low hills	No	---
	Downer	5	Knolls, low hills	No	---
EveE----------------------------- Evesboro sand, 15 to 25 percent slopes	Evesboro	95	Low hills	No	---
	Westphalia	5	Hillslopes, knolls	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
EvuB----------------------------- Evesboro-Urban land complex, 0 to 5 percent slopes	Evesboro	60	Low hills	No	---
	Urban land	30	Knolls	No	---
	Downer	5	Knolls, low hills	No	---
	Lakehurst	5	Depressions, flats	No	---
FamA----------------------------- Fallsington sandy loam, 0 to 2 percent slopes	Fallsington	85	Flats	Yes	2B3
	Manahawkin, frequently flooded	5	Flood plains, swamps	Yes	1, 3
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
	Woodstown	5	Flats	No	---
FapA----------------------------- Fallsington loam, 0 to 2 percent slopes	Fallsington	85	Depressions, flats	Yes	2B3
	Manahawkin, frequently flooded	5	Flood plains, swamps	Yes	1, 3
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
	Woodstown	5	Drainageways, flats	No	---
FauB----------------------------- Fallsington-Urban land complex, 0 to 5 percent slopes	Fallsington	75	Depressions	Yes	2B3
	Urban land	20	Flats	No	---
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
FmhAt---------------------------- Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded	Fluvaquents, loamy, frequently flooded	90	Flood plains	Yes	2A
	Udifluvents, frequently flooded	10	Flood plains	No	---
FrfB----------------------------- Freehold loamy sand, 0 to 5 percent slopes	Freehold	80	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
	Shrewsbury	5	Depressions, flats	Yes	2B3
	Tinton	5	Knolls	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
FrfC: Freehold loamy sand, 5 to 10 percent slopes	Freehold	85	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
	Tinton	5	Knolls	No	---
FrkA: Freehold sandy loam, 0 to 2 percent slopes	Freehold	90	Low hills	No	---
	Collington	5	Low hills	No	---
	Woodstown	5	Drainageways	No	---
FrkB: Freehold sandy loam, 2 to 5 percent slopes	Freehold	85	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
	Shrewsbury	5	Depressions, flats	Yes	2B3
FrkC: Freehold sandy loam, 5 to 10 percent slopes	Freehold	90	Hillslopes, knolls	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
FrkD: Freehold sandy loam, 10 to 15 percent slopes	Freehold	90	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
FrkD2: Freehold sandy loam, 10 to 15 percent slopes, eroded	Freehold, eroded	90	Hillslopes, knolls	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
FrkE: Freehold sandy loam, 15 to 25 percent slopes	Freehold	85	Hillslopes	No	---
	Collington	5	Low hills	No	---
	Colts Neck	5	Knolls	No	---
	Westphalia	5	Hillslopes, knolls	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
FrkF----------------------------- Freehold sandy loam, 25 to 40 percent slopes	Freehold	85	Hillslopes	No	---
	Collington	5	Low hills	No	---
	Colts Neck	5	Hillslopes, knolls	No	---
	Westphalia	5	Hillslopes, knolls	No	---
FrrB----------------------------- Freehold-Urban land complex, 0 to 5 percent slopes	Freehold	60	Low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Collington	5	Low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
FrrC----------------------------- Freehold-Urban land complex, 5 to 10 percent slopes	Freehold	60	Knolls, low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Collington	5	Knolls, low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
HbmB----------------------------- Hammonton loamy sand, 0 to 5 percent slopes	Hammonton	80	Depressions, flats	No	---
	Atsion	5	Depressions	Yes	2B3
	Fallsington	5	Depressions, flats	Yes	2B3
	Glassboro	5	Drainageways, flats	No	---
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3
HbrB----------------------------- Hammonton-Urban land complex, 0 to 5 percent slopes	Hammonton	70	Depressions, flats	No	---
	Urban land	20	Depressions, flats	No	---
	Downer	5	Knolls, low hills	No	---
	Glassboro	5	Drainageways, flats	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
JdrA----------------------------- Jade Run fine sandy loam, 0 to 2 percent slopes	Jade Run	90	Depressions, flats	Yes	2B3
	Deptford	5	Flats	No	---
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
JduA----------------------------- Jade Run-Urban land complex, 0 to 2 percent slopes	Jade Run	75	Depressions, flats	Yes	2B3
	Urban land	15	Flats	No	---
	Deptford	5	Flats	No	---
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
KemB----------------------------- Keyport sandy loam, 2 to 5 percent slopes	Keyport	85	Depressions, flats	No	---
	Elkton	5	Depressions	Yes	2B3
	Lenni	5	Depressions, flats	Yes	2B3
	Sassafras	5	Knolls, low hills	No	---
KemC2---------------------------- Keyport sandy loam, 5 to 10 percent slopes, eroded	Keyport, eroded	95	Flats	No	---
	Sassafras	5	Knolls	No	---
KeoA----------------------------- Keyport loam, 0 to 2 percent slopes	Keyport	80	Depressions, flats	No	---
	Elkton	5	Depressions	Yes	2B3
	Fallsington	5	Depressions, flats	Yes	2B3
	Lenni	5	Depressions, flats	Yes	2B3
	Sassafras	5	Knolls, low hills	No	---
KeuB----------------------------- Keyport-Urban land complex, 0 to 5 percent slopes	Keyport	70	Flats	No	---
	Urban land	20	Flats, knolls	No	---
	Fallsington	5	Depressions	Yes	2B3
	Lenni	5	Depressions	Yes	2B3

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
KreA---------------------------- Kresson fine sandy loam, 0 to 2 percent slopes	Kresson	85	Depressions	No	---
	Colemantown, occasionally flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Marlton	5	Flats	No	---
	Shrewsbury	5	Depressions, flats	Yes	2B3
LakB---------------------------- Lakehurst sand, 0 to 5 percent slopes	Lakehurst	85	Dunes, flats	No	---
	Atsion, rarely flooded	5	Depressions, flats	Yes	2B3
	Berryland, rarely flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Quakerbridge	5	Flats, knolls	No	---
LasB---------------------------- Lakewood sand, 0 to 5 percent slopes	Lakewood	85	Flats, knolls	No	---
	Atsion, rarely flooded	5	Depressions, flats	Yes	2B3
	Lakehurst	5	Depressions, flats	No	---
	Quakerbridge	5	Flats, knolls	No	---
LatvB--------------------------- Lakewood-Quakerbridge complex, 0 to 5 percent slopes	Lakewood	65	Flats	No	---
	Quakerbridge	30	Flats	No	---
	Lakehurst	5	Dunes, flats	No	---
LenA---------------------------- Lenni loam, 0 to 2 percent slopes	Lenni	90	Depressions	Yes	2B3
	Keyport	5	Flats	No	---
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
MakAt--------------------------- Manahawkin muck, 0 to 2 percent slopes, frequently flooded	Manahawkin, frequently flooded	85	Flood plains, swamps	Yes	1, 3
	Atsion	5	Flats	Yes	2B3
	Berryland, occasionally flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Mullica, rarely flooded	5	Depressions, drainageways, flood plains	Yes	2B3

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
MamnAv---------------------------- Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded	Mannington, very frequently flooded	55	Tidal flats	Yes	2B3
	Nanticoke, very frequently flooded	35	Tidal flats	Yes	2B3
	Udorthents	5	---	No	---
	Water	5	Tidal flats	No	---
MamuAv---------------------------- Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded	Mannington, very frequently flooded	40	Tidal flats	Yes	2B3
	Nanticoke, very frequently flooded	35	Tidal flats	Yes	2B3
	Udorthents	20	Tidal flats	No	---
	Water	5	---	No	---
MaoB------------------------------ Marlton sandy loam, 2 to 5 percent slopes	Marlton	80	Flats	No	---
	Colemantown, occasionally flooded	5	Depressions, drainageways, flats	Yes	2B3, 3
	Collington	5	Low hills	No	---
	Freehold	5	Low hills	No	---
	Kresson	5	Depressions	No	---
MaoC------------------------------ Marlton sandy loam, 5 to 10 percent slopes	Marlton	90	Hillslopes, knolls	No	---
	Collington	5	Hillslopes, knolls	No	---
	Freehold	5	Knolls, low hills	No	---
MaoC2----------------------------- Marlton sandy loam, 5 to 10 percent slopes, eroded	Marlton, eroded	95	Hillslopes, knolls	No	---
	Collington	5	Hillslopes	No	---
MaoD------------------------------ Marlton sandy loam, 10 to 15 percent slopes	Marlton	90	Hillslopes, knolls	No	---
	Collington	5	Hillslopes	No	---
	Freehold	5	Low hills	No	---
MaoD2----------------------------- Marlton sandy loam, 10 to 15 percent slopes, eroded	Marlton, eroded	90	Hillslopes	No	---
	Collington	10	Hillslopes	No	---
MauB------------------------------ Marlton-Urban land complex, 0 to 5 percent slopes	Marlton	55	Flats	No	---
	Urban land	35	Flats, knolls	No	---
	Collington	5	Low hills	No	---
	Kresson	5	Depressions	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
MumA: Mullica sandy loam, 0 to 2 percent slopes	Mullica	90	Depressions, drainageways, flood plains	Yes	2B3
	Berryland	5	Depressions, drainageways, flats	Yes	2B3, 3
	Fallsington	5	Depressions	Yes	2B3
OTKA: Othello and Fallsington soils, 0 to 2 percent slopes	Othello	55	Depressions	Yes	2B3
	Fallsington	45	Depressions, flats	Yes	2B3
PEEAR: Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded	Pedricktown, rarely flooded	45	Depressions, flats, flood plains	Yes	2B3
	Askecksy, rarely flooded	35	Depressions, flood plains, stream terraces	Yes	2B2
	Mullica, rarely flooded	20	Depressions, drainageways, flood plains	Yes	2B3
PHG: Pits, sand and gravel	Pits, sand and gravel	100	---	No	---
SabB: Sassafras loamy sand, 0 to 5 percent slopes	Sassafras	85	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---
	Woodstown	5	Drainageways	No	---
SabC: Sassafras loamy sand, 5 to 10 percent slopes	Sassafras	90	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---
SabD: Sassafras loamy sand, 10 to 15 percent slopes	Sassafras	85	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---
	Westphalia	5	Hillslopes, knolls	No	---
SabF: Sassafras loamy sand, 15 to 40 percent slopes	Sassafras	90	Hillslopes	No	---
	Westphalia	10	Hillslopes, knolls	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
SacA: Sassafras sandy loam, 0 to 2 percent slopes	Sassafras	80	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---
	Fallsington	5	Depressions, flats	Yes	2B3
	Woodstown	5	Drainageways	No	---
SacB: Sassafras sandy loam, 2 to 5 percent slopes	Sassafras	80	Knolls, low hills	No	---
	Aura	5	Knolls, low hills	No	---
	Downer	5	Knolls, low hills	No	---
	Fallsington	5	Depressions, flats	Yes	2B3
	Woodstown	5	Drainageways, flats	No	---
SacC: Sassafras sandy loam, 5 to 10 percent slopes	Sassafras	90	Hillslopes, knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Knolls, low hills	No	---
SacD: Sassafras sandy loam, 10 to 15 percent slopes	Sassafras	85	Hillslopes, knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Knolls, low hills	No	---
	Westphalia	5	Hillslopes, knolls	No	---
SapB: Sassafras-Urban land complex, 0 to 5 percent slopes	Sassafras	60	Knolls	No	---
	Urban land	30	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---
ThfB: Tinton sand, 0 to 5 percent slopes	Tinton	90	Knolls	No	---
	Collington	5	Low hills	No	---
	Freehold	5	Low hills	No	---
UdauB: Udorthents-Urban land complex, 0 to 8 percent slopes	Udorthents	60	Low hills	No	---
	Urban land	40	Low hills	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
UddB--Udorthents, dredged materials, 0 to 8 percent slopes	Udorthents, dredged materials	95	Depressions	No	---
	Water	5	Depressions	No	---
UddcB--Udorthents, dredged coarse materials, 0 to 8 percent slopes	Udorthents, dredged coarse materials	90	Depressions	No	---
	Urban land	5	Tidal flats	No	---
	Water	5	---	No	---
UddfB--Udorthents, dredged fine materials, 0 to 8 percent slopes	Udorthents, dredged fine materials	90	Depressions	No	---
	Urban land	5	Tidal flats	No	---
	Water	5	---	No	---
UddrB--Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes	Udorthents, dredged materials	65	Depressions	No	---
	Urban land	35	---	No	---
UdrB--Udorthents, refuse substratum, 0 to 8 percent slopes	Udorthents, refuse substratum	100	Low hills	No	---
UR--Urban land	Urban land	95	---	Unranked	---
	Udorthents	5	---	No	---
USAURB--Urban land-Aura complex, 0 to 5 percent slopes	Urban land	75	Knolls, low hills	No	---
	Aura	15	Low hills	No	---
	Downer	5	Low hills	No	---
	Sassafras	5	Knolls	No	---
USDOWB--Urban land-Downer complex, 0 to 5 percent slopes	Urban land	80	Flats, knolls	No	---
	Downer	15	Low hills	No	---
	Sassafras	5	Knolls	No	---
USFREB--Urban land-Freehold complex, 0 to 5 percent slopes	Urban land	75	Knolls, low hills	No	---
	Freehold	20	Low hills	No	---
	Colts Neck	5	Knolls, low hills	No	---
USSASB--Urban land-Sassafras complex, 0 to 5 percent slopes	Urban land	75	Knolls, low hills	No	---
	Sassafras	15	Knolls	No	---
	Aura	5	Low hills	No	---
	Downer	5	Low hills	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
USWESB--------------------------- Urban land-Westphalia complex, 0 to 5 percent slopes	Urban land	80	Knolls, low hills	No	---
	Westphalia	15	Knolls, low hills	No	---
	Freehold	5	Low hills	No	---
WeeB----------------------------- Westphalia fine sandy loam 2 to 5 percent slopes	Westphalia	80	Low hills	No	---
	Buddtown	5	Depressions	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
	Jade Run	5	Depressions, flats	Yes	2B3
WeeC----------------------------- Westphalia fine sandy loam, 5 to 10 percent slopes	Westphalia	90	Knobs, low hills	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
WeeD:---------------------------- Westphalia fine sandy loam, 10 to 15 percent slopes	Westphalia	90	Hillslopes, knobs	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
WeeD2---------------------------- Westphalia fine sandy loam, 10 to 15 percent slopes, eroded	Westphalia, eroded	90	Hillslopes, knobs	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
WeeF----------------------------- Westphalia fine sandy loam, 15 to 40 percent slopes	Westphalia	85	Hillslopes	No	---
	Collington	5	Low hills	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
WehB----------------------------- Westphalia-Urban land complex, 0 to 5 percent slopes	Westphalia	55	Low hills	No	---
	Urban land	30	Knolls	No	---
	Buddtown	5	Depressions	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---
WehC----------------------------- Westphalia-Urban land complex, 5 to 10 percent slopes	Westphalia	60	Low hills	No	---
	Urban land	30	Knolls, low hills	No	---
	Evesboro	5	Dunes	No	---
	Freehold	5	Low hills	No	---

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
WoeA---------------------------- Woodstown sandy loam, 0 to 2 percent slopes	Woodstown	80	Drainageways, flats	No	---
	Downer	5	Low hills	No	---
	Fallsington	5	Depressions	Yes	2B3
	Humaquepts, frequently flooded	5	Flood plains	Yes	2B3
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3
WoeB---------------------------- Woodstown sandy loam, 2 to 5 percent slopes	Woodstown	80	Drainageways, flats	No	---
	Downer	5	Knolls, low hills	No	---
	Fallsington	5	Depressions, flats	Yes	2B3
	Glassboro	5	Drainageways, flats	No	---
	Sassafras	5	Knolls, low hills	No	---
WokA---------------------------- Woodstown-Glassboro complex, 0 to 2 percent slopes	Woodstown	70	Flats	No	---
	Glassboro	15	Drainageways	No	---
	Downer	5	Low hills	No	---
	Fallsington	5	Depressions	Yes	2B3
	Mullica	5	Depressions, drainageways, flood plains	Yes	2B3

Table 12.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
WooB----------------------------- Woodstown-Urban land complex, 0 to 5 percent slopes	Woodstown	65	Low hills	No	---
	Urban land	20	Flats	No	---
	Downer	5	Low hills	No	---
	Glassboro	5	Drainageways	No	---
	Sassafras	5	Knolls	No	---

Explanation of hydric criteria codes:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   - B. are poorly drained or very poorly drained and have either:
     - 1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
     - 2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
     - 3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

Table 13a.--Building Site Development (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AtsA:							
Atsion	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
AtsAr:							
Atsion, rarely flooded	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
AucB:							
Aura	90	Not limited		Not limited		Not limited	
AugA:							
Aura	80	Not limited		Not limited		Not limited	
AugB:							
Aura	85	Not limited		Not limited		Not limited	
AugC:							
Aura	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
AupB:							
Aura	85	Not limited		Not limited		Not limited	
AvsB:							
Aura	65	Not limited		Not limited		Not limited	
Sassafras	30	Not limited		Not limited		Not limited	
AvsC:							
Aura	65	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Sassafras	30	Not limited		Not limited		Somewhat limited	
						Slope	0.88
AvtB:							
Aura	60	Not limited		Not limited		Not limited	
Sassafras	30	Not limited		Not limited		Not limited	
AvtC:							
Aura	65	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Sassafras	30	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
AvtC2:							
Aura, eroded--------	65	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Sassafras, eroded---	30	Not limited		Not limited		Somewhat limited	
						Slope	0.88
AvuB:							
Aura----------------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
AvuC:							
Aura----------------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Urban land----------	30	Not rated		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded------------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
BEXAS:							
Berryland, occasionally flooded------------	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mullica, occasionally flooded------------	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
BumA:							
Buddtown------------	65	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
Deptford------------	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
BuuB:							
Buddtown------------	65	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
Urban land----------	25	Not rated		Not rated		Not rated	

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
ChsAt:							
Chicone, frequently flooded	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
CoeAs:							
Colemantown, occasionally flooded	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
CogB:							
Collington	85	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
CogC:							
Collington	90	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.88
						Shrink-swell	0.50
CokA:							
Collington	85	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
CokB:							
Collington	90	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
CokC:							
Collington	90	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.88
						Shrink-swell	0.50
CopB:							
Collington	60	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
Urban land	30	Not rated		Not rated		Not rated	
CosB:							
Colts Neck	90	Not limited		Not limited		Not limited	
CosC:							
Colts Neck	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
DocB:							
Downer	80	Not limited		Not limited		Not limited	
DocC:							
Downer	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
DoeA:							
Downer	85	Not limited		Not limited		Not limited	
DoeB:							
Downer	90	Not limited		Not limited		Not limited	
DouB:							
Downer	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
EveB:							
Evesboro	80	Not limited		Not limited		Not limited	
EveC:							
Evesboro	95	Not limited		Not limited		Somewhat limited	
						Slope	0.88
EveE:							
Evesboro	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
EvuB:							
Evesboro	60	Not limited		Not limited		Not limited	
Urban land	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FapA:							
Fallsington	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FauB:							
Fallsington	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land	20	Not rated		Not rated		Not rated	
FmhAt:							
Fluvaquents, loamy, frequently flooded	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
FrfB:							
Freehold	80	Not limited		Not limited		Not limited	
FrfC:							
Freehold	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
FrkA:							
Freehold	90	Not limited		Not limited		Not limited	

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
FrkB:							
Freehold------------	85	Not limited		Not limited		Not limited	
FrkC:							
Freehold------------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
FrkD:							
Freehold------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
FrkD2:							
Freehold, eroded----	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
FrkE:							
Freehold------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
FrkF:							
Freehold------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
FrrB:							
Freehold------------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold------------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Urban land----------	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton-----------	80	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
HbrB:							
Hammonton-----------	70	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
Urban land----------	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
JduA:							
Jade Run------------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land----------	15	Not rated		Not rated		Not rated	
KemB:							
Keyport-------------	85	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
KemC2:							
Keyport, eroded	95	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Slope	0.88
				Shrink-swell	0.50	Shrink-swell	0.50
KeoA:							
Keyport	80	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
KeuB:							
Keyport	70	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
Urban land	20	Not rated		Not rated		Not rated	
KreA:							
Kresson	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.78			Shrink-swell	0.78
LakB:							
Lakehurst	85	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
LasB:							
Lakewood	85	Not limited		Not limited		Not limited	
LatvB:							
Lakewood	65	Not limited		Not limited		Not limited	
Quakerbridge	30	Not limited		Not limited		Not limited	
LenA:							
Lenni	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
MakAt:							
Manahawkin, frequently flooded	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
MamnAv:							
Mannington, very frequently flooded	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MamnAv:							
Nanticoke, very frequently flooded-	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
MamuAv:							
Mannington, very frequently flooded-	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Nanticoke, very frequently flooded-	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Udorthents----------	20	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
MaoB:							
Marlton-------------	80	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
MaoC:							
Marlton-------------	90	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Slope	0.88
						Shrink-swell	0.50
MaoC2:							
Marlton, eroded-----	95	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Slope	0.88
						Shrink-swell	0.50
MaoD:							
Marlton-------------	90	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	0.99	Slope	1.00
		Shrink-swell	0.50	Slope	0.63	Shrink-swell	0.50
MaoD2:							
Marlton, eroded-----	90	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	0.99	Slope	1.00
		Shrink-swell	0.50	Slope	0.63	Shrink-swell	0.50
MauB:							
Marlton-------------	55	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
Urban land----------	35	Not rated		Not rated		Not rated	

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MumA:							
Mullica	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
OTKA:							
Othello	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Fallsington	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
PEEAR:							
Pedricktown, rarely flooded	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Askecksy, rarely flooded	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mullica, rarely flooded	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
PHG:							
Pits, sand and gravel	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras	85	Not limited		Not limited		Not limited	
SabC:							
Sassafras	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
SabD:							
Sassafras	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
SabF:							
Sassafras	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
SacA:							
Sassafras	80	Not limited		Not limited		Not limited	
SacB:							
Sassafras	80	Not limited		Not limited		Not limited	

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
SacC:							
Sassafras-----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
SacD:							
Sassafras-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
SapB:							
Sassafras-----------	60	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
ThfB:							
Tinton--------------	90	Not limited		Not limited		Not limited	
UdauB:							
Udorthents----------	60	Not limited		Not limited		Not limited	
Urban land----------	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredged materials----------	95	Not limited		Not limited		Not limited	
UddcB:							
Udorthents, dredged coarse materials---	90	Not limited		Not limited		Not limited	
UddfB:							
Udorthents, dredged fine materials-----	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
UddrB:							
Udorthents, dredged materials----------	65	Not limited		Not limited		Not limited	
Urban land----------	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum---------	100	Not limited		Not limited		Not limited	
UR:							
Urban land----------	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Aura----------------	15	Not limited		Not limited		Not limited	
USDOWB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Downer--------------	15	Not limited		Not limited		Not limited	
USFREB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Freehold------------	20	Not limited		Not limited		Not limited	

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
USSASB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Sassafras-----------	15	Not limited		Not limited		Not limited	
USWESB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Westphalia----------	15	Not limited		Not limited		Not limited	
WeeB:							
Westphalia----------	80	Not limited		Not limited		Not limited	
WeeC:							
Westphalia----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
WeeD:							
Westphalia----------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
WeeD2:							
Westphalia, eroded--	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
WeeF:							
Westphalia----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
WehB:							
Westphalia----------	55	Not limited		Not limited		Not limited	
Urban land----------	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia----------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Urban land----------	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
WoeB:							
Woodstown-----------	80	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
WokA:							
Woodstown-----------	70	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
Glassboro-----------	15	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 13a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WooB:							
Woodstown-----------	65	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
Urban land----------	20	Not rated		Not rated		Not rated	

Table 13b.--Building Site Development (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AtsA:							
Atsion	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.80
AtsAr:							
Atsion, rarely flooded	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.80
		Flooding	0.40				
AucB:							
Aura	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AugA:							
Aura	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AugB:							
Aura	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AugC:							
Aura	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AupB:							
Aura	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AvsB:							
Aura	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Sassafras	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AvsC:							
Aura	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Sassafras	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AvtB:							
Aura	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Sassafras	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
AvtC:							
Aura----------------	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Sassafras-----------	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AvtC2:							
Aura, eroded--------	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Sassafras, eroded---	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
AvuB:							
Aura----------------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
AvuC:							
Aura----------------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded------------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.98
		Flooding	0.40			Too sandy	0.50
BEXAS:							
Berryland, occasionally flooded------------	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	1.00	Droughty	0.98
		Frost action	0.50	Flooding	0.60	Flooding	0.60
						Too sandy	0.50
Mullica, occasionally flooded------------	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Flooding	0.60
		Flooding	1.00	Flooding	0.60		
BumA:							
Buddtown------------	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
BumA:							
Deptford------------	30	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Depth to saturated zone	0.94	Cutbanks cave	1.00		
BuuB:							
Buddtown------------	65	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
Urban land----------	25	Not rated		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded------------	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Organic matter content	1.00		
				Flooding	0.80		
CoeAs:							
Colemantown, occasionally flooded------------	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Too clayey	0.12		
		Low strength	1.00	Cutbanks cave	0.10		
CogB:							
Collington----------	85	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
CogC:							
Collington----------	90	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
CokA:							
Collington----------	85	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
CokB:							
Collington----------	90	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
CokC:							
Collington----------	90	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
CopB:							
Collington----------	60	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
Urban land----------	30	Not rated		Not rated		Not rated	
CosB:							
Colts Neck----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.01
CosC:							
Colts Neck----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.01
DocB:							
Downer--------------	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
DocC:							
Downer--------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
DoeA:							
Downer--------------	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
DoeB:							
Downer--------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
DouB:							
Downer--------------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
EveB:							
Evesboro------------	80	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50
EveC:							
Evesboro------------	95	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50
EveE:							
Evesboro------------	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
EvuB:							
Evesboro------------	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50
Urban land----------	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
FapA:							
Fallsington---------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
FauB:							
Fallsington---------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
Urban land----------	20	Not rated		Not rated		Not rated	
FmhAt:							
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	0.10		
FrfB:							
Freehold------------	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
FrfC:							
Freehold------------	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
FrkA:							
Freehold------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
FrkB:							
Freehold------------	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
FrkC:							
Freehold------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
FrkD:							
Freehold------------	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.84	Cutbanks cave	1.00	Slope	0.84
		Frost action	0.50	Slope	0.84		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
FrkD2:							
Freehold, eroded----	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.84	Cutbanks cave	1.00	Slope	0.84
		Frost action	0.50	Slope	0.84		
FrkE:							
Freehold------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
FrkF:							
Freehold------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
FrrB:							
Freehold------------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold------------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton-----------	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
HbrB:							
Hammonton-----------	70	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
Urban land----------	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
JduA:							
Jade Run------------	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
Urban land----------	15	Not rated		Not rated		Not rated	
KemB:							
Keyport-------------	85	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
KemC2:							
Keyport, eroded-----	95	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
KeoA:							
Keyport-------------	80	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
KeuB:							
Keyport-------------	70	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
Urban land----------	20	Not rated		Not rated		Not rated	
KreA:							
Kresson-------------	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Depth to saturated zone	0.94	Too clayey	0.50		
		Shrink-swell	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
LakB:							
Lakehurst-----------	85	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.22
				Depth to saturated zone	0.99		
LasB:							
Lakewood------------	85	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50
LatvB:							
Lakewood------------	65	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
						Too sandy	0.50
Quakerbridge--------	30	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.22
LenA:							
Lenni---------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
MakAt:							
Manahawkin,							
frequently flooded-	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Flooding	1.00
		saturated zone		saturated zone		Organic matter	1.00
		Flooding	1.00	Cutbanks cave	1.00	content	
		Frost action	0.50	Organic matter	1.00	Depth to	1.00
				content		saturated zone	
				Flooding	0.80		
MamnAv:							
Mannington, very							
frequently flooded-	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Flooding	1.00	Flooding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Frost action	1.00	saturated zone		saturated zone	
		Flooding	1.00	Organic matter	1.00		
		Low strength	1.00	content			
				Cutbanks cave	0.10		
Nanticoke, very							
frequently flooded-	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Flooding	1.00	Flooding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Frost action	1.00	saturated zone		saturated zone	
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
MamuAv:							
Mannington, very							
frequently flooded-	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Flooding	1.00	Flooding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Frost action	1.00	saturated zone		saturated zone	
Nanticoke, very							
frequently flooded-	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Flooding	1.00	Flooding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Frost action	1.00	saturated zone		saturated zone	
Udorthents----------	20	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to	0.99		
				saturated zone			
				Cutbanks cave	0.10		
MaoB:							
Marlton-------------	80	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to	0.99		
		Shrink-swell	0.50	saturated zone			
		Frost action	0.50	Too clayey	0.50		
				Cutbanks cave	0.10		
MaoC:							
Marlton-------------	90	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to	0.99		
		Shrink-swell	0.50	saturated zone			
		Frost action	0.50	Too clayey	0.50		
				Cutbanks cave	0.10		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
MaoC2:							
Marlton, eroded-----	95	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
MaoD:							
Marlton-------------	90	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	0.99	Slope	0.63
		Slope	0.63	Slope	0.63		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
MaoD2:							
Marlton, eroded-----	90	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	0.99	Slope	0.63
		Slope	0.63	Slope	0.63		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
MauB:							
Marlton-------------	55	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
Urban land----------	35	Not rated		Not rated		Not rated	
MumA:							
Mullica-------------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
OTKA:							
Othello-------------	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
		Low strength	1.00				
Fallsington---------	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
PEEAR:							
Pedricktown, rarely flooded------------	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Flooding	0.40				

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
PEEAR:							
Askecksy, rarely flooded	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.90
Mullica, rarely flooded	20	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Flooding	0.40				
PHG:							
Pits, sand and gravel	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
SabC:							
Sassafras	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
SabD:							
Sassafras	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
SabF:							
Sassafras	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
SacA:							
Sassafras	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
SacB:							
Sassafras	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
SacC:							
Sassafras	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
SacD:							
Sassafras	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
SapB:							
Sassafras	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land	30	Not rated		Not rated		Not rated	

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
ThfB:							
Tinton	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Too sandy	0.50
						Droughty	0.27
UdauB:							
Udorthents	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.01
Urban land	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredged materials	95	Not limited		Somewhat limited		Somewhat limited	
				Cutbanks cave	0.10	Droughty	0.01
UddcB:							
Udorthents, dredged coarse materials	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.01
UddfB:							
Udorthents, dredged fine materials	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
UddrB:							
Udorthents, dredged materials	65	Not limited		Somewhat limited		Somewhat limited	
				Cutbanks cave	0.10	Droughty	0.01
Urban land	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
UR:							
Urban land	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land	75	Not rated		Not rated		Not rated	
Aura	15	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
USDOWB:							
Urban land	80	Not rated		Not rated		Not rated	
Downer	15	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
USFREB:							
Urban land	75	Not rated		Not rated		Not rated	
Freehold	20	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
USSASB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Sassafras-----------	15	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
USWESB:							
Urban land----------	80	Not rated		Not rated		Not rated	
Westphalia----------	15	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
WeeB:							
Westphalia----------	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
WeeC:							
Westphalia----------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
WeeD:							
Westphalia----------	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
WeeD2:							
Westphalia, eroded--	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
WeeF:							
Westphalia----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
WehB:							
Westphalia----------	55	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia----------	60	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Urban land----------	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
WoeB:							
Woodstown-----------	80	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		

Table 13b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
WokA:							
Woodstown-----------	70	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
Glassboro-----------	15	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Depth to saturated zone	0.94	Cutbanks cave	1.00		
WooB:							
Woodstown-----------	65	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	0.99		
Urban land----------	20	Not rated		Not rated		Not rated	

Table 14.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
AtsA:					
Atsion	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Organic matter content	1.00
AtsAr:					
Atsion, rarely flooded	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40
AucB:					
Aura	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	1.00		
AugA:					
Aura	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	1.00		
AugB:					
Aura	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	1.00		
AugC:					
Aura	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	1.00		
AupB:					
Aura	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	1.00		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
AvsB:					
Aura----------------	65	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	1.00		
Sassafras-----------	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
AvsC:					
Aura----------------	65	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	1.00		
Sassafras-----------	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	0.72		
AvtB:					
Aura----------------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	1.00		
Sassafras-----------	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
AvtC:					
Aura----------------	65	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	1.00		
Sassafras-----------	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	0.72		
AvtC2:					
Aura, eroded--------	65	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	1.00		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
AvtC2:					
Sassafras, eroded---	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	0.72		
AvuB:					
Aura----------------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	1.00		
Urban land----------	30	Not rated		Not rated	
AvuC:					
Aura----------------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	1.00		
Urban land----------	30	Not rated		Not rated	
BerAr:					
Berryland, rarely flooded-----------	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Flooding	0.40
		Filtering capacity	1.00		
		Flooding	0.40		
BEXAS:					
Berryland, occasionally flooded-----------	50	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
		Filtering capacity	1.00		
Mullica, occasionally flooded-----------	40	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Organic matter content	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
BumA:					
Buddtown	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46		
Deptford	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
BuuB:					
Buddtown	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Slope	0.08
Urban land	25	Not rated		Not rated	
ChsAt:					
Chicone, frequently flooded	95	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72	Organic matter content	1.00
CoeAs:					
Colemantown, occasionally flooded	90	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.28
CogB:					
Collington	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72	Slope	0.08
CogC:					
Collington	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.72	Seepage	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
CokA:					
Collington	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72		
CokB:					
Collington	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
CokC:					
Collington	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Slow water movement	0.72		
CopB:					
Collington	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
Urban land	30	Not rated		Not rated	
CosB:					
Colts Neck	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
CosC:					
Colts Neck	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
DocB:					
Downer	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
DocC:					
Downer	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
DoeA:					
Downer	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
DoeB:					
Downer	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
DouB:					
Downer	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
Urban land	30	Not rated		Not rated	
EveB:					
Evesboro	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Filtering capacity	1.00		
EveC:					
Evesboro	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Filtering capacity	1.00		
EveE:					
Evesboro	95	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
EvuB:					
Evesboro	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Filtering capacity	1.00		
Urban land	30	Not rated		Not rated	
FamA:					
Fallsington	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Organic matter content	1.00
		Slow water movement	0.72		
FapA:					
Fallsington	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Organic matter content	1.00
		Slow water movement	0.72		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
FauB:					
Fallsington	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.72	Organic matter content	1.00
Urban land	20	Not rated		Not rated	
FmhAt:					
Fluvaquents, loamy, frequently flooded	90	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
FrfB:					
Freehold	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.08
FrfC:					
Freehold	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
FrkA:					
Freehold	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46		
FrkB:					
Freehold	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.08
FrkC:					
Freehold	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
FrkD:					
Freehold------------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Slope	0.84		
		Slow water movement	0.46		
FrkD2:					
Freehold, eroded----	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Slope	0.84		
		Slow water movement	0.46		
FrkE:					
Freehold------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46		
FrkF:					
Freehold------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46		
FrrB:					
Freehold------------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.46		
Urban land----------	30	Not rated		Not rated	
FrrC:					
Freehold------------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	0.46		
Urban land----------	30	Not rated		Not rated	
HbmB:					
Hammonton-----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.08
HbrB:					
Hammonton-----------	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.08

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
HbrB:					
Urban land----------	20	Not rated		Not rated	
JdrA:					
Jade Run------------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
JduA:					
Jade Run------------	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
Urban land----------	15	Not rated		Not rated	
KemB:					
Keyport-------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.28
				Slope	0.08
KemC2:					
Keyport, eroded-----	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	1.00
				Seepage	0.28
KeoA:					
Keyport-------------	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.28
KeuB:					
Keyport-------------	70	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.28
				Slope	0.08
Urban land----------	20	Not rated		Not rated	
KreA:					
Kresson-------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
LakB:					
Lakehurst-----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00	Slope	0.08
LasB:					
Lakewood------------	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.08
LatvB:					
Lakewood------------	65	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.08
Quakerbridge--------	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.08
LenA:					
Lenni---------------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
MakAt:					
Manahawkin, frequently flooded-	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00	Organic matter content	1.00
MamnAv:					
Mannington, very frequently flooded-	55	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Organic matter content	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
MamnAv:					
Nanticoke, very frequently flooded	35	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Organic matter content	1.00
MamuAv:					
Mannington, very frequently flooded	40	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Nanticoke, very frequently flooded	35	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Udorthents	20	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
MaoB:					
Marlton	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.08
MaoC:					
Marlton	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
MaoC2:					
Marlton, eroded	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
MaoD:					
Marlton	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
MaoD2:					
Marlton, eroded	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
MauB:					
Marlton	55	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.08
Urban land	35	Not rated		Not rated	
MumA:					
Mullica	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00
OTKA:					
Othello	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.72	Organic matter content	1.00
Fallsington	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.72	Organic matter content	1.00

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
PEEAR:					
Pedricktown, rarely flooded	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Slow water movement	0.72	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40
Askecksy, rarely flooded	35	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Flooding	0.40
		Flooding	0.40		
Mullica, rarely flooded	20	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Flooding	0.40	Organic matter content	1.00
				Flooding	0.40
PHG:					
Pits, sand and gravel	100	Not rated		Not rated	
SabB:					
Sassafras	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72	Slope	0.08
SabC:					
Sassafras	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72	Slope	1.00
SabD:					
Sassafras	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.72	Seepage	1.00
		Slope	0.63		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
SabF:					
Sassafras-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72		
SacA:					
Sassafras-----------	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72		
SacB:					
Sassafras-----------	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
SacC:					
Sassafras-----------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Slow water movement	0.72		
SacD:					
Sassafras-----------	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Slow water movement	0.72		
		Slope	0.63		
SapB:					
Sassafras-----------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Slow water movement	0.72		
Urban land----------	30	Not rated		Not rated	
ThfB:					
Tinton--------------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
UdauB:					
Udorthents----------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
Urban land----------	40	Not rated		Not rated	

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
UddB:					
Udorthents, dredged materials----------	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
UddcB:					
Udorthents, dredged coarse materials---	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
UddfB:					
Udorthents, dredged fine materials-----	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.32
UddrB:					
Udorthents, dredged materials----------	65	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
Urban land----------	35	Not rated		Not rated	
UdrB:					
Udorthents, refuse substratum---------	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
UR:					
Urban land----------	95	Not rated		Not rated	
USAURB:					
Urban land----------	75	Not rated		Not rated	
Aura----------------	15	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	1.00	Slope	0.08
USDOWB:					
Urban land----------	80	Not rated		Not rated	
Downer--------------	15	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
USFREB:					
Urban land----------	75	Not rated		Not rated	
Freehold------------	20	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.08

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
USSASB:					
Urban land	75	Not rated		Not rated	
Sassafras	15	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72	Slope	0.08
USWESB:					
Urban land	80	Not rated		Not rated	
Westphalia	15	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.08
WeeB:					
Westphalia	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.08
WeeC:					
Westphalia	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	1.00
WeeD:					
Westphalia	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.63		
WeeD2:					
Westphalia, eroded	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.63		
WeeF:					
Westphalia	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		

Table 14.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
WehB:					
Westphalia----------	55	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.08
		Filtering capacity	1.00		
Urban land----------	30	Not rated		Not rated	
WehC:					
Westphalia----------	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	1.00
		Filtering capacity	1.00		
Urban land----------	30	Not rated		Not rated	
WoeA:					
Woodstown-----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
		Slow water movement	0.72		
WoeB:					
Woodstown-----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.08
		Slow water movement	0.72		
WokA:					
Woodstown-----------	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
		Slow water movement	0.72		
Glassboro-----------	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
WooB:					
Woodstown-----------	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.08
		Slow water movement	0.72		
Urban land----------	20	Not rated		Not rated	

Table 15.--Disposal Fields

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value the greater the limitation. The recommended system type listed under "Type of installation permitted in New Jersey" was derived from NJAC 7:9A standards--see footnotes at end of table. The recommended system type is generally the most desirable for the given soil and site conditions. See text for further explanation of ratings, suitability classes, and system types used in this table.)

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
AtsA:							
Atsion	90	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
						IIIHr	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AtsAr:							
Atsion, rarely flooded	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIWr	1.00
						IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AucB:							
Aura	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AugA:							
Aura	80	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AugB:							
Aura	85	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AugC:							
Aura	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
AupB:							
Aura--------------	85	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
AvsB:							
Aura--------------	65	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Sassafras---------	30	Not limited		C		I	
AvsC:							
Aura--------------	65	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Sassafras---------	30	Not limited		C		I	
AvtB:							
Aura--------------	60	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Sassafras---------	30	Not limited		C		I	
AvtC:							
Aura--------------	65	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Sassafras---------	30	Not limited		C		I	
AvtC2:							
Aura, eroded------	65	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Sassafras, eroded-	30	Not limited		C		I	
AvuB:							
Aura--------------	60	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
AvuB:							
Urban land	30	Not rated		Not rated		Not rated	
AvuC:							
Aura	60	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
Urban land	30	Not rated		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIWr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIHr	1.00
BEXAS:							
Berryland, occasionally flooded	50	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIWr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIHr	1.00
Mullica, occasionally flooded	40	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
BumA:							
Buddtown	65	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Deptford	30	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
BuuB:							
Buddtown----------	65	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Urban land--------	25	Not rated		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded----------	95	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
CoeAs:							
Colemantown, occasionally flooded----------	90	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIWr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIHr	1.00
CogB:							
Collington--------	85	Not limited		C		I	
CogC:							
Collington--------	90	Not limited		C		I	
CokA:							
Collington--------	85	Not limited		C		I	
CokB:							
Collington--------	90	Not limited		C		I	
CokC:							
Collington--------	90	Not limited		C		I	
CopB:							
Collington--------	60	Not limited		C		I	
Urban land--------	30	Not rated		Not rated		Not rated	
CosB:							
Colts Neck--------	90	Not limited		C		I	
CosC:							
Colts Neck--------	90	Not limited		C		I	
DocB:							
Downer------------	80	Not limited		C		I	

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
DocC:							
Downer	90	Not limited		C		I	
DoeA:							
Downer	85	Not limited		C		I	
DoeB:							
Downer	90	Not limited		C		I	
DouB:							
Downer	60	Not limited		C		I	
Urban land	30	Not rated		Not rated		Not rated	
EveB:							
Evesboro	80	Not limited		C		I	
EveC:							
Evesboro	95	Not limited		C		I	
EveE:							
Evesboro	95	Not limited		C		I	
EvuB:							
Evesboro	60	Not limited		C		I	
Urban land	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
FapA:							
Fallsington	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
FauB:							
Fallsington	75	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Urban land	20	Not rated		Not rated		Not rated	

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Disposal field NJAC 7:9A: Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Type of installation permitted in NJ*: Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	NJ suitability class**: Value
FmhAt:							
Fluvaquents, loamy, frequently flooded----------	90	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
FrfB:							
Freehold----------	80	Not limited		C		I	
FrfC:							
Freehold----------	85	Not limited		C		I	
FrkA:							
Freehold----------	90	Not limited		C		I	
FrkB:							
Freehold----------	85	Not limited		C		I	
FrkC:							
Freehold----------	90	Not limited		C		I	
FrkD:							
Freehold----------	90	Not limited		C		I	
FrkD2:							
Freehold, eroded--	90	Not limited		C		I	
FrkE:							
Freehold----------	85	Not limited		C		I	
FrkF:							
Freehold----------	85	Very limited					
		Not permitted Too steep	1.00	Not permitted Too steep	1.00	Not permitted Too steep	1.00
FrrB:							
Freehold----------	60	Not limited		C		I	
Urban land--------	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold----------	60	Not limited		C		I	
Urban land--------	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton---------	80	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A		Type of installation permitted in NJ*		NJ suitability class** (for each limitation most restrictive class is listed)	
		Rating class and limiting features	Value	Limiting features and recommended system type	Value	Suitability class and limiting feature	Value
HbrB:							
Hammonton---------	70	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Urban land--------	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run----------	90	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
JduA:							
Jade Run----------	75	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Urban land--------	15	Not rated		Not rated		Not rated	
KemB:							
Keyport-----------	85	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIWr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00		
KemC2:							
Keyport, eroded---	95	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIWr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00		
KeoA:							
Keyport-----------	80	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIIWr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00		

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
KeuB:							
Keyport-----------	70	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Urban land--------	20	Not rated		Not rated		Not rated	
KreA:							
Kresson-----------	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
LakB:							
Lakehurst---------	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
LasB:							
Lakewood----------	85	Not limited		C		I	
LatvB:							
Lakewood----------	65	Not limited		C		I	
Quakerbridge------	30	Somewhat limited					
		Depth to apparent zone of saturation	0.49	M	0.49	IIWr	0.49
LenA:							
Lenni-------------	90	Very limited					
		Depth to apparent zone of	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
MakAt:							
Manahawkin, frequently flooded----------	85	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Disposal field NJAC 7:9A: Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Type of installation permitted in NJ*: Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	NJ suitability class**: Value
MamnAv:							
Mannington, very frequently flooded----------	55	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Nanticoke, very frequently flooded----------	35	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
MamuAv:							
Mannington, very frequently flooded----------	40	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Nanticoke, very frequently flooded----------	35	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Udorthents--------	20	Somewhat limited					
		Depth to apparent zone of saturation	0.83	M	0.83	IIWr	0.83
MaoB:							
Marlton-----------	80	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
MaoC:							
Marlton-----------	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
MaoC2:							
Marlton, eroded---	95	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
MaoD:							
Marlton-----------	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
MaoD2:							
Marlton, eroded---	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
MauB:							
Marlton-----------	55	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Urban land--------	35	Not rated		Not rated		Not rated	
MumA:							
Mullica-----------	90	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
OTKA:							
Othello	55	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Fallsington	45	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
PEEAR:							
Pedricktown, rarely flooded	45	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Askecksy, rarely flooded	35	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
Mullica, rarely flooded	20	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	Not permitted Flooding	1.00
		Not permitted Flooding	1.00	Not permitted Flooding	1.00	IIIWr	1.00
		Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00	Not permitted Hydric soil	1.00
PHG:							
Pits, sand and gravel	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras	85	Not limited		C		I	
SabC:							
Sassafras	90	Not limited		C		I	
SabD:							
Sassafras	85	Not limited		C		I	

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A: Rating class and limiting features	Value	Type of installation permitted in NJ*: Limiting features and recommended system type	Value	NJ suitability class** (for each limitation most restrictive class is listed): Suitability class and limiting feature	Value
SabF:							
Sassafras---------	90	Not limited		C		I	
SacA:							
Sassafras---------	80	Not limited		C		I	
SacB:							
Sassafras---------	80	Not limited		C		I	
SacC:							
Sassafras---------	90	Not limited		C		I	
SacD:							
Sassafras---------	85	Not limited		C		I	
SapB:							
Sassafras---------	60	Not limited		C		I	
Urban land--------	30	Not rated		Not rated		Not rated	
ThfB:							
Tinton------------	90	Not limited		C		I	
UdauB:							
Udorthents--------	60	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Urban land--------	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredge materials--------	95	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
UddcB:							
Udorthents, dredge coarse materials-	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
UddfB:							
Udorthents, dredge fine materials---	90	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIISr	1.00

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A		Type of installation permitted in NJ*		NJ suitability class** (for each limitation most restrictive class is listed)	
		Rating class and limiting features	Value	Limiting features and recommended system type	Value	Suitability class and limiting feature	Value
UddrB:							
Udorthents, dredge materials--------	65	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
						IIISr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00		
Urban land--------	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum-------	100	Not limited		C		I	
UR:							
Urban land--------	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land--------	75	Not rated		Not rated		Not rated	
Aura--------------	15	Very limited					
		Restrictive substratum	1.00	Restrictive substratum	1.00	IIIHr	1.00
		Restrictive horizon	1.00	SRB, SRE	1.00	IIISr	1.00
USDOWB:							
Urban land--------	80	Not rated		Not rated		Not rated	
Downer------------	15	Not limited		C		I	
USFREB:							
Urban land--------	75	Not rated		Not rated		Not rated	
Freehold----------	20	Not limited		C		I	
USSASB:							
Urban land--------	75	Not rated		Not rated		Not rated	
Sassafras---------	15	Not limited		C		I	
USWESB:							
Urban land--------	80	Not rated		Not rated		Not rated	
Westphalia--------	15	Not limited		C		I	
WeeB:							
Westphalia--------	80	Not limited		C		I	
WeeC:							
Westphalia--------	90	Not limited		C		I	
WeeD:							
Westphalia--------	90	Not limited		C		I	
WeeD2:							
Westphalia, eroded	90	Not limited		C		I	

Table 15.--Disposal Fields--Continued

Map symbol and soil name	Pct. of map unit	Disposal field NJAC 7:9A		Type of installation permitted in NJ*		NJ suitability class** (for each limitation most restrictive class is listed)	
		Rating class and limiting features	Value	Limiting features and recommended system type	Value	Suitability class and limiting feature	Value
WeeF:							
Westphalia	85	Not limited		C		I	
WehB:							
Westphalia	55	Not limited		C		I	
Urban land	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia	60	Not limited		C		I	
Urban land	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown	80	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
WoeB:							
Woodstown	80	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
WokA:							
Woodstown	70	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Glassboro	15	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
WooB:							
Woodstown	65	Very limited					
		Depth to apparent zone of saturation	1.00	Depth to apparent zone of saturation	1.00	IIIWr	1.00
Urban land	20	Not rated		Not rated		Not rated	

* Type of disposal field installation (see text for further explanation):

C = conventional installation
C drain = interceptor drain or other means of removing the perched zone of saturation
SRB = soil replacement, bottom-lined installation
SRE = soil replacement, fill enclosed installation
M = mound installation

** For further explanation of the NJ suitability classes (IIHr, IIIWr, etc.), refer to NJAC 7:9A, "Standards for Individual Subsurface Sewage Disposal Systems." These classes are briefly described in the text.

Table 16a.--Construction Materials (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
AtsA:					
Atsion	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.47
		Bottom layer	0.00	Thickest layer	0.47
AtsAr:					
Atsion, rarely flooded	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.47
		Bottom layer	0.00	Thickest layer	0.47
AucB:					
Aura	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.13
AugA:					
Aura	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.13
AugB:					
Aura	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
AugC:					
Aura	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.13
AupB:					
Aura	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
AvsB:					
Aura	65	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
Sassafras	30	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
AvsC:					
Aura	65	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
Sassafras	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
AvtB:					
Aura	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
Sassafras	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.24
		Thickest layer	0.00	Bottom layer	0.24
AvtC:					
Aura	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.13
Sassafras	30	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
AvtC2:					
Aura, eroded	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.13
Sassafras, eroded	30	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
AvuB:					
Aura	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
Urban land	30	Not rated		Not rated	
AvuC:					
Aura	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
Urban land	30	Not rated		Not rated	
BerAr:					
Berryland, rarely flooded	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.30
		Thickest layer	0.00	Thickest layer	0.47
BEXAS:					
Berryland, occasionally flooded	50	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.30
		Bottom layer	0.00	Thickest layer	0.47
Mullica, occasionally flooded	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.08

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
BumA:					
Buddtown------------	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.57
Deptford------------	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.05
BuuB:					
Buddtown------------	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.57
Urban land----------	25	Not rated		Not rated	
ChsAt:					
Chicone, frequently flooded------------	95	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.47
		Thickest layer	0.00	Thickest layer	0.47
CoeAs:					
Colemantown, occasionally flooded------------	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
CogB:					
Collington----------	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
CogC:					
Collington----------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
CokA:					
Collington----------	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
CokB:					
Collington----------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
CokC:					
Collington----------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
CopB:					
Collington----------	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Urban land----------	30	Not rated		Not rated	

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
CosB:					
Colts Neck----------	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
CosC:					
Colts Neck----------	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
DocB:					
Downer--------------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.64
DocC:					
Downer--------------	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.64
DoeA:					
Downer--------------	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.64
DoeB:					
Downer--------------	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.64
DouB:					
Downer--------------	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.64
Urban land----------	30	Not rated		Not rated	
EveB:					
Evesboro------------	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.47
EveC:					
Evesboro------------	95	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.47
EveE:					
Evesboro------------	95	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.47
EvuB:					
Evesboro------------	60	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.47
Urban land----------	30	Not rated		Not rated	
FamA:					
Fallsington---------	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
FapA:					
Fallsington---------	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
FauB:					
Fallsington---------	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.24
		Thickest layer	0.00	Bottom layer	0.24
Urban land----------	20	Not rated		Not rated	
FmhAt:					
Fluvaquents, loamy, frequently flooded-	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
FrfB:					
Freehold-----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
FrfC:					
Freehold-----------	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
FrkA:					
Freehold-----------	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
FrkB:					
Freehold-----------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
FrkC:					
Freehold-----------	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
FrkD:					
Freehold-----------	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
FrkD2:					
Freehold, eroded----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
FrkE:					
Freehold-----------	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
FrkF:					
Freehold-----------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
FrrB:					
Freehold------------	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
Urban land----------	30	Not rated		Not rated	
FrrC:					
Freehold------------	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
Urban land----------	30	Not rated		Not rated	
HbmB:					
Hammonton-----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.47
HbrB:					
Hammonton-----------	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.47
Urban land----------	20	Not rated		Not rated	
JdrA:					
Jade Run------------	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.51
JduA:					
Jade Run------------	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.51
Urban land----------	15	Not rated		Not rated	
KemB:					
Keyport-------------	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
KemC2:					
Keyport, eroded-----	95	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
KeoA:					
Keyport-------------	80	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
KeuB:					
Keyport-------------	70	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Urban land----------	20	Not rated		Not rated	

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
KreA:					
Kresson	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
LakB:					
Lakehurst	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.47
		Thickest layer	0.00	Bottom layer	0.47
LasB:					
Lakewood	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.47
		Bottom layer	0.00	Thickest layer	0.47
LatvB:					
Lakewood	65	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.47
		Bottom layer	0.00	Thickest layer	0.47
Quakerbridge	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.47
		Bottom layer	0.00	Bottom layer	0.47
LenA:					
Lenni	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
MakAt:					
Manahawkin, frequently flooded	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.47
		Bottom layer	0.00	Bottom layer	0.47
MamnAv:					
Mannington, very frequently flooded	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nanticoke, very frequently flooded	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
MamuAv:					
Mannington, very frequently flooded	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nanticoke, very frequently flooded	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Udorthents	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
MaoB:					
Marlton-------------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
MaoC:					
Marlton-------------	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
MaoC2:					
Marlton, eroded-----	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
MaoD:					
Marlton-------------	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
MaoD2:					
Marlton, eroded-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
MauB:					
Marlton-------------	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Urban land----------	35	Not rated		Not rated	
MumA:					
Mullica-------------	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.08
OTKA:					
Othello-------------	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.47
Fallsington---------	45	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
PEEAR:					
Pedricktown, rarely flooded------------	45	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.00	Bottom layer	0.44
Askecksy, rarely flooded------------	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.47
		Thickest layer	0.00	Thickest layer	0.47
Mullica, rarely flooded------------	20	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.08

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
PHG:					
Pits, sand and gravel	100	Not rated		Not rated	
SabB:					
Sassafras	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.24
		Bottom layer	0.00	Bottom layer	0.24
SabC:					
Sassafras	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SabD:					
Sassafras	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SabF:					
Sassafras	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SacA:					
Sassafras	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SacB:					
Sassafras	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SacC:					
Sassafras	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.24
		Thickest layer	0.00	Thickest layer	0.24
SacD:					
Sassafras	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
SapB:					
Sassafras	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24
Urban land	30	Not rated		Not rated	
ThfB:					
Tinton	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.16
UdauB:					
Udorthents	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.10
Urban land	40	Not rated		Not rated	

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
UddB:					
Udorthents, dredged materials----------	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
UddcB:					
Udorthents, dredged coarse materials---	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.81
UddfB:					
Udorthents, dredged fine materials-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UddrB:					
Udorthents, dredged materials----------	65	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
Urban land----------	35	Not rated		Not rated	
UdrB:					
Udorthents, refuse substratum---------	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UR:					
Urban land----------	95	Not rated		Not rated	
USAURB:					
Urban land----------	75	Not rated		Not rated	
Aura----------------	15	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.13
USDOWB:					
Urban land----------	80	Not rated		Not rated	
Downer--------------	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.64
USFREB:					
Urban land----------	75	Not rated		Not rated	
Freehold------------	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
USSASB:					
Urban land----------	75	Not rated		Not rated	
Sassafras-----------	15	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.24
		Bottom layer	0.00	Thickest layer	0.24

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
USWESB:					
Urban land----------	80	Not rated		Not rated	
Westphalia----------	15	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.00	Thickest layer	0.17
WeeB:					
Westphalia----------	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
WeeC:					
Westphalia----------	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.00	Thickest layer	0.17
WeeD:					
Westphalia----------	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
WeeD2:					
Westphalia, eroded--	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
WeeF:					
Westphalia----------	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
WehB:					
Westphalia----------	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
Urban land----------	30	Not rated		Not rated	
WehC:					
Westphalia----------	60	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.13
		Thickest layer	0.00	Thickest layer	0.17
Urban land----------	30	Not rated		Not rated	
WoeA:					
Woodstown-----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
WoeB:					
Woodstown-----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10
WokA:					
Woodstown-----------	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.10

Table 16a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
WokA:					
Glassboro-----------	15	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.44
		Bottom layer	0.00	Bottom layer	0.57
WooB:					
Woodstown-----------	65	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.10
Urban land----------	20	Not rated		Not rated	

Table 16b.--Construction Materials (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
AtsA:							
Atsion	90	Poor		Poor		Poor	
		Too sandy	0.00	Wetness depth	0.00	Too sandy	0.00
		Organic matter content low	0.00			Wetness depth	0.00
		Too acid	0.00			Too acid	0.32
		Droughty	0.62				
AtsAr:							
Atsion, rarely flooded	85	Poor		Poor		Poor	
		Too sandy	0.00	Wetness depth	0.00	Too sandy	0.00
		Organic matter content low	0.00			Wetness depth	0.00
		Too acid	0.00			Too acid	0.32
		Droughty	0.62				
AucB:							
Aura	90	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.12
		Too acid	0.00			Rock fragments	0.82
		Organic matter content low	0.02			Hard to reclaim (rock fragments)	0.95
AugA:							
Aura	80	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
AugB:							
Aura	85	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
AugC:							
Aura	90	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
AupB:							
Aura	85	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
AvsB:							
Aura	65	Poor		Good		Poor	
		Wind erosion	0.00			Rock fragments	0.00
		Too acid	0.00			Too acid	0.68
		Organic matter content low	0.02			Hard to reclaim (rock fragments)	0.95
Sassafras	30	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.22
		Organic matter content low	0.12				
		Too sandy	0.22				
		Too acid	0.84				
AvsC:							
Aura	65	Poor		Good		Poor	
		Wind erosion	0.00			Rock fragments	0.00
		Too acid	0.00			Too acid	0.68
		Organic matter content low	0.02			Hard to reclaim (rock fragments)	0.95
Sassafras	30	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.22
		Organic matter content low	0.12				
		Too sandy	0.22				
		Too acid	0.84				
AvtB:							
Aura	60	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
Sassafras	30	Poor		Good		Fair	
		Too acid	0.00			Too acid	0.12
		Organic matter content low	0.12			Rock fragments	0.82
AvtC:							
Aura	65	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
Sassafras	30	Poor		Good		Fair	
		Too acid	0.00			Too acid	0.12
		Organic matter content low	0.12			Rock fragments	0.82
AvtC2:							
Aura, eroded	65	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
Sassafras, eroded	30	Poor		Good		Fair	
		Too acid	0.00			Too sandy	0.22
		Organic matter content low	0.12				
		Too sandy	0.22				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
AvuB:							
Aura----------------	60	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
Urban land----------	30	Not rated		Not rated		Not rated	
AvuC:							
Aura----------------	60	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95
Urban land----------	30	Not rated		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded------------	85	Poor		Poor		Poor	
		Organic matter content low	0.00	Wetness depth	0.00	Too sandy	0.00
		Too sandy	0.00			Wetness depth	0.00
		Wind erosion	0.00			Too acid	0.76
		Too acid	0.03				
		Droughty	0.91				
BEXAS:							
Berryland, occasionally flooded------------	50	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.00			Too sandy	0.00
		Too sandy	0.00			Too acid	0.76
		Too acid	0.03				
		Droughty	0.91				
Mullica, occasionally flooded------------	40	Poor		Poor		Poor	
		Organic matter content low	0.00	Wetness depth	0.00	Wetness depth	0.00
		Too acid	0.00			Hard to reclaim (rock fragments)	0.26
						Too acid	0.76
BumA:							
Buddtown------------	65	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.20			Too acid	0.98
		Water erosion	0.90				
Deptford------------	30	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.04	Wetness depth	0.04
		Too acid	0.20			Too acid	0.76
		Water erosion	0.90				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
BuuB:							
Buddtown------------	65	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.20			Too acid	0.98
		Water erosion	0.90				
Urban land----------	25	Not rated		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded------------	95	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
						Too acid	0.98
CoeAs:							
Colemantown, occasionally flooded------------	90	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.02	Shrink-swell	0.95	Too clayey	0.00
		Too acid	0.32			Too acid	0.88
CogB:							
Collington----------	85	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.95
		Organic matter content low	0.00				
		Too acid	0.12				
CogC:							
Collington----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.95
		Wind erosion	0.00				
		Too acid	0.12				
CokA:							
Collington----------	85	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.95
		Too acid	0.12				
CokB:							
Collington----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.95
		Too acid	0.12				
CokC:							
Collington----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.95
		Too acid	0.12				
CopB:							
Collington----------	60	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.95
		Too acid	0.12				
Urban land----------	30	Not rated		Not rated		Not rated	

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
CosB:							
Colts Neck----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Hard to reclaim (rock fragments)	0.82
		Too acid	0.00				
CosC:							
Colts Neck----------	90	Poor		Good		Fair	
		Too acid	0.00			Hard to reclaim (rock fragments)	0.82
		Organic matter content low	0.00				
DocB:							
Downer--------------	80	Poor		Good		Good	
		Organic matter content low	0.00				
		Wind erosion	0.00				
		Too acid	0.20				
DocC:							
Downer--------------	90	Poor		Good		Good	
		Wind erosion	0.00				
		Organic matter content low	0.00				
		Too acid	0.20				
DoeA:							
Downer--------------	85	Poor		Good		Good	
		Organic matter content low	0.00				
		Too acid	0.20				
DoeB:							
Downer--------------	90	Poor		Good		Good	
		Organic matter content low	0.00				
		Too acid	0.20				
DouB:							
Downer--------------	60	Poor		Good		Good	
		Organic matter content low	0.00				
		Too acid	0.20				
Urban land----------	30	Not rated		Not rated		Not rated	
EveB:							
Evesboro------------	80	Poor		Good		Poor	
		Wind erosion	0.00			Too sandy	0.00
		Organic matter content low	0.00			Too acid	0.76
		Too sandy	0.00				
		Too acid	0.50				
		Droughty	0.98				
EveC:							
Evesboro------------	95	Poor		Good		Poor	
		Wind erosion	0.00			Too sandy	0.00
		Organic matter content low	0.00			Too acid	0.76
		Too sandy	0.00				
		Too acid	0.50				
		Droughty	0.98				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
EveE:							
Evesboro------------	95	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.50	Slope	0.00
		Organic matter content low	0.00			Too sandy	0.00
						Too acid	0.76
		Wind erosion	0.00				
		Too acid	0.50				
		Droughty	0.98				
EvuB:							
Evesboro------------	60	Poor		Good		Poor	
		Organic matter content low	0.00			Too sandy	0.00
						Too acid	0.76
		Too sandy	0.00				
		Wind erosion	0.00				
		Too acid	0.50				
		Droughty	0.98				
Urban land----------	30	Not rated		Not rated		Not rated	
FamA:							
Fallsington---------	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too acid	0.59
						Rock fragments	0.76
FapA:							
Fallsington---------	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too acid	0.59
						Rock fragments	0.76
FauB:							
Fallsington---------	75	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too acid	0.59
						Rock fragments	0.76
Urban land----------	20	Not rated		Not rated		Not rated	
FmhAt:							
Fluvaquents, loamy, frequently flooded-	90	Fair		Poor		Poor	
		Organic matter content low	0.12	Wetness depth	0.00	Wetness depth	0.00
		Too acid	0.84				
		Water erosion	0.90				
FrfB:							
Freehold------------	80	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.92
		Organic matter content low	0.00				
		Too acid	0.50				
FrfC:							
Freehold------------	85	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.92
		Organic matter content low	0.00				
		Too acid	0.50				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
FrkA:							
Freehold-----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
FrkB:							
Freehold-----------	85	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
FrkC:							
Freehold-----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
FrkD:							
Freehold-----------	90	Poor		Good		Fair	
		Organic matter content low	0.00			Slope	0.16
						Too acid	0.92
		Too acid	0.50				
FrkD2:							
Freehold, eroded----	90	Poor		Good		Fair	
		Organic matter content low	0.00			Slope	0.16
						Too acid	0.92
		Too acid	0.50				
FrkE:							
Freehold-----------	85	Poor		Fair		Poor	
		Organic matter content low	0.00	Slope	0.50	Slope	0.00
						Too acid	0.92
		Too acid	0.50				
FrkF:							
Freehold-----------	85	Poor		Poor		Poor	
		Organic matter content low	0.00	Slope	0.00	Slope	0.00
						Too acid	0.92
		Too acid	0.50				
Freehold-----------	60	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
Urban land----------	30	Not rated		Not rated		Not rated	
FrrC:							
Freehold-----------	60	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
Urban land----------	30	Not rated		Not rated		Not rated	
HbmB:							
Hammonton-----------	80	Poor		Fair		Fair	
		Wind erosion	0.00	Wetness depth	0.89	Too acid	0.59
		Organic matter content low	0.00			Wetness depth	0.89
		Too acid	0.50				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
HbrB:							
Hammonton	70	Poor		Fair		Fair	
		Organic matter content low	0.00	Wetness depth	0.89	Too acid	0.59
		Wind erosion	0.00			Wetness depth	0.89
		Too acid	0.50				
Urban land	20	Not rated		Not rated		Not rated	
JdrA:							
Jade Run	90	Poor		Poor		Poor	
		Organic matter content low	0.00	Wetness depth	0.00	Wetness depth	0.00
		Too acid	0.16				
		Water erosion	0.90				
JduA:							
Jade Run	75	Poor		Poor		Poor	
		Organic matter content low	0.00	Wetness depth	0.00	Wetness depth	0.00
		Too acid	0.16				
		Water erosion	0.90				
Urban land	15	Not rated		Not rated		Not rated	
KemB:							
Keyport	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.89
				Wetness depth	0.89		
		Too acid	0.54	Shrink-swell	0.89		
KemC2:							
Keyport, eroded	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Wetness depth	0.89
				Wetness depth	0.89	Too acid	0.98
		Too acid	0.20				
KeoA:							
Keyport	80	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.89
				Wetness depth	0.89		
		Too acid	0.54	Shrink-swell	0.89		
		Water erosion	0.99				
KeuB:							
Keyport	70	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.89
				Wetness depth	0.89		
		Too acid	0.54	Shrink-swell	0.89		
Urban land	20	Not rated		Not rated		Not rated	
KreA:							
Kresson	85	Poor		Fair		Poor	
		Too clayey	0.00	Wetness depth	0.04	Too clayey	0.00
		Organic matter content low	0.02	Shrink-swell	0.98	Wetness depth	0.04
						Too acid	0.59
		Too acid	0.12				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
LakB:							
Lakehurst-----------	85	Poor		Fair		Poor	
		Too sandy	0.00	Wetness depth	0.89	Too sandy	0.00
		Organic matter content low	0.00			Too acid	0.32
						Wetness depth	0.89
		Too acid	0.00				
LasB:							
Lakewood------------	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.76
		Organic matter content low	0.00				
		Too acid	0.03				
		Droughty	0.98				
LatvB:							
Lakewood------------	65	Poor		Good		Poor	
		Organic matter content low	0.00			Too sandy	0.00
						Too acid	0.76
		Too sandy	0.00				
		Wind erosion	0.00				
		Too acid	0.03				
		Droughty	0.98				
Quakerbridge--------	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Organic matter content low	0.00			Too acid	0.76
		Too acid	0.00				
LenA:							
Lenni---------------	90	Fair		Poor		Poor	
		Organic matter content low	0.12	Wetness depth	0.00	Wetness depth	0.00
						Too clayey	0.29
		Too acid	0.20			Too acid	0.76
		Too clayey	0.50				
		Water erosion	0.99				
MakAt:							
Manahawkin, frequently flooded-	85	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness depth	0.00	Wetness depth	0.00
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.20			Organic matter content high	0.00
		Organic matter content low	0.88				
						Too acid	0.76
MamnAv:							
Mannington, very frequently flooded-	55	Fair		Poor		Poor	
		Too acid	0.84	Low strength	0.00	Wetness depth	0.00
				Wetness depth	0.00		
Nanticoke, very frequently flooded-	35	Fair		Poor		Poor	
		Too acid	0.84	Wetness depth	0.00	Wetness depth	0.00
		Water erosion	0.99	Low strength	0.00		

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
MamuAv:							
Mannington, very frequently flooded-	40	Fair		Poor		Poor	
		Too acid	0.84	Wetness depth	0.00	Wetness depth	0.00
				Low strength	0.00		
Nanticoke, very frequently flooded-	35	Fair		Poor		Poor	
		Too acid	0.84	Wetness depth	0.00	Wetness depth	0.00
		Water erosion	0.99	Low strength	0.00		
Udorthents----------	20	Fair		Poor		Fair	
		Water erosion	0.99	Low strength	0.00	Wetness depth	0.89
				Wetness depth	0.89		
MaoB:							
Marlton-------------	80	Poor		Fair		Poor	
		Organic matter content low	0.00	Wetness depth	0.89	Too clayey	0.00
				Shrink-swell	0.95	Wetness depth	0.89
		Too clayey	0.00			Too acid	0.98
		Too acid	0.54				
		Water erosion	0.99				
MaoC:							
Marlton-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Wetness depth	0.89	Too clayey	0.00
		Organic matter content low	0.00	Shrink-swell	0.95	Wetness depth	0.89
						Too acid	0.98
		Too acid	0.54				
		Water erosion	0.99				
MaoC2:							
Marlton, eroded-----	95	Poor		Fair		Poor	
		Organic matter content low	0.00	Wetness depth	0.89	Too clayey	0.00
				Shrink-swell		Wetness depth	0.89
		Too clayey	0.00		0.95	Too acid	0.98
		Too acid	0.20				
		Water erosion	0.99				
MaoD:							
Marlton-------------	90	Poor		Fair		Poor	
		Organic matter content low	0.00	Wetness depth	0.89	Too clayey	0.00
				Shrink-swell	0.95	Slope	0.37
		Too clayey	0.00			Wetness depth	0.89
		Too acid	0.54			Too acid	0.98
		Water erosion	0.99				
MaoD2:							
Marlton, eroded-----	90	Poor		Fair		Poor	
		Organic matter content low	0.00	Wetness depth	0.89	Too clayey	0.00
				Shrink-swell	0.95	Slope	0.37
		Too clayey	0.00			Wetness depth	0.89
		Too acid	0.20			Too acid	0.98
		Water erosion	0.99				
MauB:							
Marlton-------------	55	Poor		Fair		Poor	
		Too clayey	0.00	Wetness depth	0.89	Too clayey	0.00
		Organic matter content low	0.00	Shrink-swell	0.95	Wetness depth	0.89
						Too acid	0.98
		Too acid	0.20				
		Water erosion	0.99				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
MauB:							
Urban land----------	35	Not rated		Not rated		Not rated	
MumA:							
Mullica-------------	90	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.00			Hard to reclaim (rock fragments)	0.26
						Too acid	0.76
OTKA:							
Othello-------------	55	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too acid	0.12
Fallsington---------	45	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too acid	0.59
						Rock fragments	0.76
PEEAR:							
Pedricktown, rarely flooded------------	45	Poor		Poor		Poor	
		Too acid	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12			Too sandy	0.22
		Too sandy	0.22				
Askecksy, rarely flooded------------	35	Poor		Poor		Poor	
		Too sandy	0.00	Wetness depth	0.00	Too sandy	0.00
		Wind erosion	0.00			Wetness depth	0.00
		Droughty	0.27			Too acid	0.82
		Too acid	0.50				
		Organic matter content low	0.88				
Mullica, rarely flooded------------	20	Poor		Poor		Poor	
		Organic matter content low	0.00	Wetness depth	0.00	Wetness depth	0.00
						Hard to reclaim (rock fragments)	0.26
		Too acid	0.00				
						Too acid	0.76
PHG:							
Pits, sand and gravel-------------	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras-----------	85	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.22
		Organic matter content low	0.12				
		Too sandy	0.22				
		Too acid	0.84				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
SabC:							
Sassafras-----------	90	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.22
		Organic matter content low	0.12				
		Too sandy	0.22				
		Too acid	0.84				
SabD:							
Sassafras-----------	85	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.22
		Organic matter content low	0.12			Slope	0.37
		Too sandy	0.22				
		Too acid	0.84				
SabF:							
Sassafras-----------	90	Poor		Poor		Poor	
		Wind erosion	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12			Too sandy	0.22
		Too sandy	0.22				
		Too acid	0.84				
SacA:							
Sassafras-----------	80	Fair		Good		Good	
		Organic matter content low	0.12				
		Too acid	0.84				
SacB:							
Sassafras-----------	80	Fair		Good		Good	
		Organic matter content low	0.12				
		Too acid	0.84				
SacC:							
Sassafras-----------	90	Fair		Good		Good	
		Organic matter content low	0.12				
		Too acid	0.84				
SacD:							
Sassafras-----------	85	Fair		Good		Fair	
		Organic matter content low	0.12			Slope	0.37
		Too acid	0.84				
SapB:							
Sassafras-----------	60	Fair		Good		Good	
		Organic matter content low	0.12				
		Too acid	0.84				
Urban land----------	30	Not rated		Not rated		Not rated	
ThfB:							
Tinton--------------	90	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.76
		Organic matter content low	0.00				
		Too acid	0.12				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
UdauB:							
Udorthents----------	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.68				
		Organic matter content low	0.88				
Urban land----------	40	Not rated		Not rated		Not rated	
UddB:							
Udorthents, dredged materials----------	95	Fair		Good		Good	
		Too acid	0.68				
		Organic matter content low	0.88				
UddcB:							
Udorthents, dredged coarse materials---	90	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.68				
		Organic matter content low	0.88				
UddfB:							
Udorthents, dredged fine materials-----	90	Poor		Poor		Poor	
		Organic matter content low	0.00	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.89	Rock fragments	0.92
		Too clayey	0.00				
		Too acid	0.68				
		Water erosion	0.90				
UddrB:							
Udorthents, dredged materials----------	65	Fair		Good		Good	
		Too acid	0.68				
		Organic matter content low	0.88				
Urban land----------	35	Not rated		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum---------	100	Fair		Poor		Good	
		Water erosion	0.99	Low strength	0.00		
UR:							
Urban land----------	95	Not rated		Not rated		Not rated	
USAURB:							
Urban land----------	75	Not rated		Not rated		Not rated	
Aura----------------	15	Poor		Good		Poor	
		Too acid	0.00			Rock fragments	0.00
		Organic matter content low	0.02			Too acid	0.68
						Hard to reclaim (rock fragments)	0.95

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
USDOWB:							
Urban land	80	Not rated		Not rated		Not rated	
Downer	15	Poor		Good		Good	
		Organic matter content low	0.00				
		Too acid	0.20				
USFREB:							
Urban land	75	Not rated		Not rated		Not rated	
Freehold	20	Poor		Good		Fair	
		Organic matter content low	0.00			Too acid	0.92
		Too acid	0.50				
USSASB:							
Urban land	75	Not rated		Not rated		Not rated	
Sassafras	15	Fair		Good		Good	
		Organic matter content low	0.12				
		Too acid	0.84				
USWESB:							
Urban land	80	Not rated		Not rated		Not rated	
Westphalia	15	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
						Too acid	0.59
		Too acid	0.12				
		Too sandy	0.22				
		Water erosion	0.99				
WeeB:							
Westphalia	80	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
						Too acid	0.59
		Too acid	0.12				
		Too sandy	0.22				
		Water erosion	0.99				
WeeC:							
Westphalia	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
						Too acid	0.59
		Too acid	0.12				
		Too sandy	0.22				
		Water erosion	0.99				
WeeD:							
Westphalia	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
						Slope	0.37
		Too acid	0.12			Too acid	0.59
		Too sandy	0.22				
		Water erosion	0.99				

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
WeeD2:							
Westphalia, eroded--	90	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
		Too acid	0.12			Slope	0.37
		Too sandy	0.22			Too acid	0.59
		Water erosion	0.99				
WeeF:							
Westphalia----------	85	Poor		Poor		Poor	
		Organic matter content low	0.00	Slope	0.00	Slope	0.00
		Too acid	0.12			Too sandy	0.22
		Too sandy	0.22			Too acid	0.59
		Water erosion	0.99				
WehB:							
Westphalia----------	55	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
		Too acid	0.12			Too acid	0.59
		Too sandy	0.22				
		Water erosion	0.99				
Urban land----------	30	Not rated		Not rated		Not rated	
WehC:							
Westphalia----------	60	Poor		Good		Fair	
		Organic matter content low	0.00			Too sandy	0.22
		Too acid	0.12			Too acid	0.59
		Too sandy	0.22				
		Water erosion	0.99				
Urban land----------	30	Not rated		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.50				
WoeB:							
Woodstown-----------	80	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.50				
WokA:							
Woodstown-----------	70	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.50				
Glassboro-----------	15	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.04	Wetness depth	0.04
		Too acid	0.12			Too sandy	0.22
		Too sandy	0.22			Too acid	0.59
						Rock fragments	0.82

Table 16b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
WooB:							
Woodstown-----------	65	Fair		Fair		Fair	
		Organic matter content low	0.02	Wetness depth	0.89	Wetness depth	0.89
		Too acid	0.50				
Urban land----------	20	Not rated		Not rated		Not rated	

Table 17.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
AtsA:							
Atsion	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.47		
AtsAr:							
Atsion, rarely flooded	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.47		
AucB:							
Aura	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
AugA:							
Aura	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
AugB:							
Aura	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
AugC:							
Aura	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
AupB:							
Aura	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
AvsB:							
Aura	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Sassafras	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
AvsC:							
Aura	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Sassafras	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
AvtB:							
Aura	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Sassafras	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
AvtC:							
Aura----------------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Sassafras-----------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
AvtC2:							
Aura, eroded--------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Sassafras, eroded---	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
AvuB:							
Aura----------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
AvuC:							
Aura----------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
BerAr:							
Berryland, rarely flooded------------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.47		
BEXAS:							
Berryland, occasionally flooded------------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.47		
Mullica, occasionally flooded------------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.08		
BumA:							
Buddtown------------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.57	Depth to saturated zone	0.06
Deptford------------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Piping	1.00		
				Seepage	0.05		

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BuuB:							
Buddtown------------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.57	Depth to saturated zone	0.06
Urban land----------	25	Not limited		Not rated		Not rated	
ChsAt:							
Chicone, frequently flooded------------	95	Very limited		Very limited		Very limited	
		Seepage	1.00	Organic matter content	1.00	Cutbanks cave	1.00
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Seepage	0.47		
CoeAs:							
Colemantown, occasionally flooded------------	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.54	Ponding	1.00	Slow refill	0.28
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.01		
CogB:							
Collington----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
CogC:							
Collington----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
CokA:							
Collington----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
CokB:							
Collington----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
CokC:							
Collington----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
CopB:							
Collington----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.01	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
CosB:							
Colts Neck----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
CosC:							
Colts Neck----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
DocB:							
Downer	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
DocC:							
Downer	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
DoeA:							
Downer	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
DoeB:							
Downer	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
DouB:							
Downer	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
Urban land	30	Not limited		Not rated		Not rated	
EveB:							
Evesboro	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
EveC:							
Evesboro	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
EveE:							
Evesboro	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
		Slope	0.12				
EvuB:							
Evesboro	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
Urban land	30	Not limited		Not rated		Not rated	
FamA:							
Fallsington	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.24		
FapA:							
Fallsington	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.24		
FauB:							
Fallsington	75	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.24		
Urban land	20	Not limited		Not rated		Not rated	

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FmhAt:							
Fluvaquents, loamy, frequently flooded-	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	0.10
				Depth to saturated zone	1.00		
				Piping	1.00		
FrfB:							
Freehold------------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
FrfC:							
Freehold------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
FrkA:							
Freehold------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
FrkB:							
Freehold------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
FrkC:							
Freehold------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
FrkD:							
Freehold------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.01				
FrkD2:							
Freehold, eroded----	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.01				
FrkE:							
Freehold------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.12				
FrkF:							
Freehold------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.72				
FrrB:							
Freehold------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
FrrC:							
Freehold------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
HbmB:							
Hammonton-----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.47	Depth to saturated zone	0.06
HbrB:							
Hammonton-----------	70	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.47	Depth to saturated zone	0.06
Urban land----------	20	Not limited		Not rated		Not rated	
JdrA:							
Jade Run------------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.51		
JduA:							
Jade Run------------	75	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.51		
Urban land----------	15	Not limited		Not rated		Not rated	
KemB:							
Keyport-------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.54	Depth to saturated zone	0.86	Slow refill	0.46
						Cutbanks cave	0.10
						Depth to saturated zone	0.06
KemC2:							
Keyport, eroded-----	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.54	Depth to saturated zone	0.86	Slow refill	0.46
						Cutbanks cave	0.10
						Depth to saturated zone	0.06
KeoA:							
Keyport-------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.54	Depth to saturated zone	0.86	Slow refill	0.46
						Cutbanks cave	0.10
						Depth to saturated zone	0.06
KeuB:							
Keyport-------------	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.54	Depth to saturated zone	0.86	Slow refill	0.46
						Cutbanks cave	0.10
						Depth to saturated zone	0.06
Urban land----------	20	Not limited		Not rated		Not rated	
KreA:							
Kresson-------------	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
				Seepage	0.03		

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
LakB:							
Lakehurst----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.47	Depth to saturated zone	0.06
LasB:							
Lakewood-----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
LatvB:							
Lakewood-----------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
Quakerbridge--------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.47	Depth to water	1.00
LenA:							
Lenni---------------	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.79		
				Seepage	0.05		
MakAt:							
Manahawkin, frequently flooded-	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.47		
MamnAv:							
Mannington, very frequently flooded-	55	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	0.10
				Depth to saturated zone	1.00		
				Piping	1.00		
Nanticoke, very frequently flooded-	35	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Ponding	1.00	Slow refill	0.96
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.96		
MamuAv:							
Mannington, very frequently flooded-	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	0.10
				Depth to saturated zone	1.00		
				Piping	1.00		
Nanticoke, very frequently flooded-	35	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Ponding	1.00	Slow refill	0.96
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.96		

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
MamuAv:							
Udorthents----------	20	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Piping	1.00	Slow refill	0.96
				Depth to saturated zone	0.86	Cutbanks cave	0.10
						Depth to saturated zone	0.06
MaoB:							
Marlton-------------	80	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
				Seepage	0.03	Depth to saturated zone	0.06
MaoC:							
Marlton-------------	90	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
				Seepage	0.03	Depth to saturated zone	0.06
MaoC2:							
Marlton, eroded-----	95	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
				Seepage	0.03	Depth to saturated zone	0.06
MaoD:							
Marlton-------------	90	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
		Slope	0.01	Seepage	0.03	Depth to saturated zone	0.06
MaoD2:							
Marlton, eroded-----	90	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
		Slope	0.01	Seepage	0.03	Depth to saturated zone	0.06
MauB:							
Marlton-------------	55	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	0.10
				Seepage	0.03	Depth to saturated zone	0.06
Urban land----------	35	Not limited		Not rated		Not rated	
MumA:							
Mullica-------------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.08		
OTKA:							
Othello-------------	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Piping	1.00		
				Seepage	0.47		
Fallsington---------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.24		

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
PEEAR:							
Pedricktown, rarely flooded-----------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Ponding	1.00		
				Seepage	0.44		
Askecksy, rarely flooded-----------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	0.47		
Mullica, rarely flooded-----------	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Ponding	1.00		
				Seepage	0.08		
PHG:							
Pits, sand and gravel-------------	100	Not rated		Not rated		Not rated	
SabB:							
Sassafras-----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
SabC:							
Sassafras-----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
SabD:							
Sassafras-----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
		Slope	0.01				
SabF:							
Sassafras-----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
		Slope	0.28				
SacA:							
Sassafras-----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
SacB:							
Sassafras-----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
SacC:							
Sassafras-----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
SacD:							
Sassafras-----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
		Slope	0.01				

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
SapB:							
Sassafras-----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
ThfB:							
Tinton--------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.16	Depth to water	1.00
UdauB:							
Udorthents----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
Urban land----------	40	Not limited		Not rated		Not rated	
UddB:							
Udorthents, dredged materials----------	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.03	Depth to water	1.00
UddcB:							
Udorthents, dredged coarse materials---	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.81	Depth to water	1.00
UddfB:							
Udorthents, dredged fine materials-----	90	Not limited		Somewhat limited		Very limited	
				Hard to pack	0.44	Depth to water	1.00
UddrB:							
Udorthents, dredged materials----------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.03	Depth to water	1.00
Urban land----------	35	Not limited		Not rated		Not rated	
UdrB:							
Udorthents, refuse substratum---------	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
UR:							
Urban land----------	95	Not limited		Not rated		Not rated	
USAURB:							
Urban land----------	75	Not limited		Not rated		Not rated	
Aura----------------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
USDOWB:							
Urban land----------	80	Not limited		Not rated		Not rated	
Downer--------------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.64	Depth to water	1.00
USFREB:							
Urban land----------	75	Not limited		Not rated		Not rated	

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
USFREB:							
Freehold-----------	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
USSASB:							
Urban land----------	75	Not limited		Not rated		Not rated	
Sassafras-----------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.24	Depth to water	1.00
USWESB:							
Urban land----------	80	Not limited		Not rated		Not rated	
Westphalia----------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
WeeB:							
Westphalia----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
WeeC:							
Westphalia----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
WeeD:							
Westphalia----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
		Slope	0.01				
WeeD2:							
Westphalia, eroded--	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
		Slope	0.01				
WeeF:							
Westphalia----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
		Slope	0.28				
WehB:							
Westphalia----------	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
WehC:							
Westphalia----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
Urban land----------	30	Not limited		Not rated		Not rated	
WoeA:							
Woodstown-----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.10	Depth to saturated zone	0.06
WoeB:							
Woodstown-----------	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.10	Depth to saturated zone	0.06

Table 17.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WokA:							
Woodstown-----------	70	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.10	Depth to saturated zone	0.06
Glassboro-----------	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.57		
WooB:							
Woodstown-----------	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
				Seepage	0.10	Depth to saturated zone	0.06
Urban land----------	20	Not limited		Not rated		Not rated	

Table 18.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
AtsA:												
Atsion----------	0-2	Peat	PT	A-8	0	0	84-100	80-100	61-83	9-18	---	---
	2-4	Sand	SP-SM, SM	A-3, A-2-4	0	0	84-100	80-100	61-83	9-18	0-30	NP-5
	4-26	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	87-100	85-100	65-83	9-18	0-21	NP-5
	26-34	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	87-100	85-100	65-88	9-23	0-26	NP-9
	34-46	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	86-100	83-100	64-88	9-23	0-26	NP-9
	46-51	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	86-100	83-100	64-83	9-18	0-21	NP-5
	51-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-3, A-2-4	0	0	72-100	69-100	53-88	8-23	0-25	NP-9
AtsAr:												
Atsion, rarely flooded--------	0-2	Peat	PT	A-8	0	0	84-100	80-100	61-83	9-18	---	---
	2-4	Sand	SP-SM, SM	A-3, A-2-4	0	0	84-100	80-100	61-83	9-18	0-30	NP-5
	4-26	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	87-100	85-100	65-83	9-18	0-21	NP-5
	26-34	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	87-100	85-100	65-88	9-23	0-26	NP-9
	34-46	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	86-100	83-100	64-88	9-23	0-26	NP-9
	46-51	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	86-100	83-100	64-83	9-18	0-21	NP-5
	51-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-3, A-2-4	0	0	72-100	69-100	53-88	8-23	0-25	NP-9
AucB:												
Aura------------	0-7	Loamy sand	SC, SM	A-2-4	0	0	80-92	78-92	60-81	21-35	0-30	NP-9
	7-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-1-a, A-2-4, A-2-6	0	0	40-78	36-76	21-52	13-33	18-28	4-11
	28-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	39-77	36-76	30-75	16-45	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, GP-GM, SC	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AugA:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-2-4	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-1-a, A-2-4, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, GP-GM, SC	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AugB:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
AugC:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AupB:												
Aura------------	0-8	Loam	SM, CL-ML, CL	A-4	0	0	77-91	75-90	63-82	44-60	20-33	3-10
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvsB:												
Aura------------	0-7	Loamy sand	SC, SM	A-2-4	0	0	80-92	78-92	60-81	21-35	0-30	NP-9
	7-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	GC-GM, SC	A-1-a, A-2-4, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, GP-GM, SC	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-6, A-7-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
AvsC:												
Aura------------	0-7	Loamy sand	SC, SM	A-2-4	0	0	80-92	78-92	60-81	21-35	0-30	NP-9
	7-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, GP-GM, SC	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-6, A-7-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SM, SC-SM, SC	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvtB:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, GP-GM, SC	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvtB:												
Sassafras-------	0-12	Sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-6, A-7-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
AvtC:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvtC:												
Sassafras-------	0-12	Sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvtC2:												
Aura, eroded----	0-6	Sandy loam, coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	6-11	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	11-20	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	20-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-2-6, A-7-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
AvtC2:												
Sassafras, eroded---------	0-9	Sandy loam, gravelly sandy loam, sandy clay loam, gravelly sandy clay loam	SC-SM, CL	A-2-4, A-1-b, A-7-6	0	0	71-92	70-92	48-87	22-53	20-43	4-24
	9-15	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	15-25	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	25-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AvuB:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	GC-GM, SC	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-b, A-1-a, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
AvuC:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	SC, GC-GM	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
BerAr:												
Berryland, rarely flooded-	0-11	Sand	SP-SM, SM	A-3, A-2-4	0	0	74-100	71-100	55-83	8-18	0-30	NP-5
	11-19	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-26	NP-9
	19-32	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-25	NP-9
	32-40	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-26	NP-9
	40-44	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	79-100	77-100	59-88	8-23	0-25	NP-9
	44-80	Stratified sand to sandy loam, sand	SC-SM, SP-SM, SC	A-2-4, A-3	0	0	80-100	78-100	57-86	6-20	0-26	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
BEXAS:												
Berryland, occasionally flooded--------	0-11	Sand	SP-SM, SM	A-3, A-2-4	0	0	74-100	71-100	55-83	8-18	0-30	NP-5
	11-19	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-26	NP-9
	19-32	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-25	NP-9
	32-40	Sand, loamy sand	SP-SM, SC	A-3, A-2-4	0	0	81-100	79-100	60-88	9-23	0-26	NP-9
	40-44	Sand, loamy sand	SC, SP-SM	A-3, A-2-4	0	0	79-100	77-100	59-88	8-23	0-25	NP-9
	44-80	Stratified sand to sandy loam, sand	SC-SM, SP-SM, SC	A-2-4, A-3	0	0	79-100	77-100	56-86	6-20	0-26	NP-10
Mullica, occasionally flooded--------	0-2	Mucky peat	PT	A-8	0	0	79-100	78-100	58-83	28-45	---	---
	2-9	Sandy loam	SM	A-2-4, A-4	0	0	79-100	78-100	58-83	28-45	21-35	3-10
	9-14	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	14-28	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	28-31	Loamy sand, sand, stratified sand to loamy sand	SM, SC	A-2-4, A-4	0	0	80-100	79-100	60-88	20-38	0-26	NP-9
	31-40	Loamy sand, sand, stratified sand to loamy sand	SP-SM, SC	A-2-4, A-3	0	0	80-100	79-100	60-88	9-23	0-26	NP-9
	40-80	Gravelly loamy sand, gravelly sand, loamy sand, sand	SM, GM, SC	A-4, A-1-b	0	0	54-95	54-95	41-83	14-36	0-25	NP-9
BumA:												
Buddtown--------	0-9	Fine sandy loam	SM, CL	A-4, A-6	0	0	93-100	92-100	79-100	39-58	0-33	NP-12
	9-12	Very fine sandy loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	87-100	50-63	20-30	6-12
	12-26	Loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	78-91	58-69	22-29	7-12
	26-34	Loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	78-91	58-69	22-29	7-12
	34-41	Loamy coarse sand	SM, SC	A-2-4, A-1-b	0	0	81-100	79-100	42-65	17-32	0-26	NP-9
	41-54	Loamy sand	SM, SC	A-2-4, A-4	0	0	80-100	78-100	60-88	21-38	0-26	NP-9
	54-65	Coarse sand, sand	SC-SM, SW-SM, SP-SM	A-2-4, A-1-b	0	0	82-100	80-100	36-52	8-17	0-22	NP-5
	65-80	Coarse sand, sand	SC-SM, SW-SM, SP-SM	A-2-4, A-1-b	0	0	82-100	80-100	36-52	8-17	0-22	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
BumA:												
Deptford--------	0-8	Very fine sandy loam	ML, CL	A-4, A-6	0	0	92-100	91-100	87-100	50-70	0-33	NP-12
	8-12	Very fine sandy loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	85-100	51-64	20-30	6-12
	12-22	Loam, silt loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	79-92	61-73	22-29	7-12
	22-46	Very fine sandy loam, sandy loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	85-100	51-64	20-29	6-12
	46-50	Fine sandy loam, sandy loam, loamy fine sand, stratified loamy very fine sand to very fine sandy loam	SC, SM, CL	A-6, A-2-4	0	0	79-100	78-100	58-89	28-51	0-29	NP-12
	50-62	Fine sandy loam, sandy loam, loamy fine sand, stratified loamy very fine sand to very fine sandy loam	SC, SM, CL	A-6, A-2-4	0	0	79-100	78-100	58-89	28-51	0-29	NP-12
	62-80	Stratified loamy very fine sand to very fine sandy loam, stratified gravelly loamy very fine sand to gravelly very fine sandy loam, gravelly sandy loam, gravelly fine sandy loam, gravelly loamy fine sand	SC-SM, SM, SC	A-2-4, A-6	0	0	66-100	64-100	57-100	16-40	0-29	NP-12
BuuB:												
Buddtown--------	0-9	Fine sandy loam	SM, CL	A-4, A-6	0	0	93-100	92-100	79-100	39-58	0-33	NP-12
	9-12	Very fine sandy loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	87-100	50-63	20-30	6-12
	12-26	Loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	78-91	58-69	22-29	7-12
	26-34	Loam	CL, CL-ML	A-4, A-6	0	0	92-100	91-100	78-91	58-69	22-29	7-12
	34-41	Loamy coarse sand	SM, SC	A-1-b, A-2-4	0	0	81-100	79-100	42-65	17-32	0-26	NP-9
	41-54	Loamy sand	SM, SC	A-2-4, A-4	0	0	80-100	78-100	60-88	21-38	0-26	NP-9
	54-65	Coarse sand, sand	SC-SM, SW-SM, SP-SM	A-2-4, A-1-b	0	0	82-100	80-100	36-52	8-17	0-22	NP-5
	65-80	Coarse sand, sand	SC-SM, SW-SM, SP-SM	A-2-4, A-1-b	0	0	82-100	80-100	36-52	8-17	0-22	NP-5
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
ChsAt:												
Chicone, frequently flooded--------	0-5	Silt loam	CL-ML, ML	A-4, A-6	0	0	97-100	96-100	95-100	79-88	26-40	7-12
	5-20	Silt loam	CL-ML, CL	A-4, A-6	0	0	97-100	96-100	95-100	79-88	22-33	7-12
	20-28	Silt loam, loam	CL-ML, CL, ML	A-4, A-6	0	0	97-100	96-100	90-100	74-88	18-33	3-12
	28-65	Mucky peat	PT	A-8	0	0	72-100	70-100	54-88	8-23	---	---
	65-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-2-4, A-3	0	0	72-100	70-100	54-88	8-23	0-28	NP-9
CoeAs:												
Colemantown, occasionally flooded--------	0-10	Loam	CL, SM, ML	A-4, A-7-6	0	0	84-100	83-100	66-100	45-74	22-47	3-18
	10-24	Clay	CH, CL	A-7-6	0	0	83-100	82-100	71-100	51-82	48-67	28-44
	24-34	Sandy clay, sandy clay loam	CH, SC	A-7-6, A-2-6	0	0	83-100	82-100	50-95	27-68	31-63	13-40
	34-50	Stratified clay loam to sandy clay loam, clay loam, sandy clay loam	CL	A-7-6, A-6	0	0	84-100	83-100	67-100	52-82	31-50	13-29
	50-80	Stratified sandy loam to sandy clay loam, sandy loam, sandy clay loam	SC, SM, CL	A-6, A-2-4, A-7-6	0	0	84-100	83-100	59-100	26-62	16-44	2-25
CogB:												
Collington------	0-9	Loamy sand	SM, SC	A-2-4, A-4	0	0	86-100	84-100	65-88	22-38	0-30	NP-9
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CogC:												
Collington------	0-9	Loamy sand	SM, SC	A-2-4, A-4	0	0	86-100	84-100	65-88	22-38	0-30	NP-9
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13
CokA:												
Collington------	0-9	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13
CokB:												
Collington------	0-9	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CokC:												
Collington------	0-9	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13
CopB:												
Collington------	0-9	Sandy loam, loamy sand	SC-SM, SM, SC	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	9-22	Loam, sandy clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-81	29-41	12-21
	22-30	Loam, clay loam	CL	A-6, A-7-6	0	0	85-100	83-100	74-100	57-86	29-46	12-25
	30-38	Sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	85-100	84-100	60-81	30-46	16-27	2-10
	38-43	Stratified sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-86	27-49	0-30	NP-13
	43-80	Stratified sandy loam to fine sandy loam to loamy fine sand, stratified sand to loamy sand	SC-SM, CL, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	70-100	28-51	0-30	NP-13
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
CosB:												
Colts Neck------	0-8	Sandy loam, channery sandy loam, loamy sand, channery loamy sand	SC-SM, SM, SC	A-2-4, A-4, A-6	0	2-11	80-97	79-97	57-82	27-45	0-32	NP-11
	8-25	Sandy loam, channery sandy loam, sandy clay loam, channery sandy clay loam	CL, SC	A-6, A-7-6, A-4	0	2-14	83-97	82-97	62-91	37-62	24-43	9-24
	25-41	Sandy clay loam	CL, SC	A-6, A-7-6	0	0-4	96-100	96-100	81-99	44-60	29-43	13-24
	41-46	Channery sandy loam, channery loamy sand, parachannery sandy loam, parachannery loamy sand, sandy loam, loamy sand	SC-SM, SC	A-2-4, A-4, A-6	0	2-14	83-98	83-98	63-82	34-47	20-29	6-12
	46-65	Channery loamy sand, channery loamy coarse sand, flaggy loamy sand, flaggy loamy coarse sand, parachannery loamy sand, parachannery loamy coarse sand, paraflaggy loamy sand, paraflaggy loamy coarse sand	SC-SM, SC, SM	A-2-4, A-2-6	0-4	7-24	77-92	76-92	58-85	17-35	0-30	NP-13
	65-70	Loamy coarse sand, loamy sand	SC-SM, SC, SM	A-2-4, A-6	0	0	100	100	52-69	19-36	0-30	NP-13
	70-74	Channery loamy sand, channery loamy coarse sand, flaggy loamy coarse sand, flaggy loamy sand, parachannery loamy sand, parachannery loamy coarse sand, paraflaggy loamy coarse sand, paraflaggy loamy sand	SC-SM, SC, SM	A-2-4, A-2-6	0-4	7-24	77-92	76-92	58-85	17-35	0-30	NP-13
	74-80	Loamy sand, loamy coarse sand	SC-SM, SC, SM	A-2-4, A-6	0	0	100	100	76-93	22-39	0-30	NP-13

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CosC:												
Colts Neck------	0-8	Sandy loam, channery sandy loam, loamy sand, channery loamy sand	SC, SM, SC-SM	A-2-4, A-4, A-6	0	2-11	80-97	79-97	57-82	27-45	0-32	NP-11
	8-25	Sandy loam, channery sandy loam, sandy clay loam, channery sandy clay loam	CL, SC	A-6, A-7-6, A-4	0	2-14	83-97	82-97	62-91	37-62	24-43	9-24
	25-41	Sandy clay loam	CL, SC	A-6, A-7-6	0	0-4	96-100	96-100	81-99	44-60	29-43	13-24
	41-46	Channery sandy loam, channery loamy sand, parachannery sandy loam, parachannery loamy sand, sandy loam, loamy sand	SC-SM, SC	A-4, A-2-4, A-6	0	2-14	83-98	83-98	63-82	34-47	20-29	6-12
	46-65	Channery loamy sand, channery loamy coarse sand, flaggy loamy sand, flaggy loamy coarse sand, parachannery loamy sand, parachannery loamy coarse sand, paraflaggy loamy sand, paraflaggy loamy coarse sand	SC-SM, SC, SM	A-2-4, A-2-6	0-4	7-24	77-92	76-92	58-85	17-35	0-30	NP-13
	65-70	Loamy coarse sand, loamy sand	SC-SM, SC, SM	A-2-4, A-6	0	0	100	100	52-69	19-36	0-30	NP-13
	70-74	Channery loamy sand, channery loamy coarse sand, flaggy loamy coarse sand, flaggy loamy sand, parachannery loamy sand, parachannery loamy coarse sand, paraflaggy loamy coarse sand, paraflaggy loamy sand	SC-SM, SC, SM	A-2-4, A-2-6	0-4	7-24	77-92	76-92	58-85	17-35	0-30	NP-13
	74-80	Loamy sand, loamy coarse sand	SC-SM, SC, SM	A-2-4, A-6	0	0	100	100	76-93	22-39	0-30	NP-13

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
DocB:												
Downer----------	0-10	Loamy sand	SM, SC	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	10-16	Loamy sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-88	17-38	0-26	NP-9
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-4, A-1-b	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10
DocC:												
Downer----------	0-10	Loamy sand	SM, SC	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	10-16	Loamy sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-88	17-38	0-26	NP-9
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10
DoeA:												
Downer----------	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	79-100	78-100	58-81	29-44	18-30	2-7
	10-16	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	66-100	64-100	46-81	23-46	17-27	3-10
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
DoeB:												
Downer----------	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	79-100	78-100	58-81	29-44	18-30	2-7
	10-16	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	66-100	64-100	46-81	23-46	17-27	3-10
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10
DouB:												
Downer----------	0-10	Sandy loam, loamy sand	SC, SM, SC-SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-16	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	66-100	64-100	46-81	23-46	17-27	3-10
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-1-b, A-4	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
EveB:												
Evesboro--------	0-4	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-24	NP-5
	4-17	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	17-31	Sand, loamy sand	SP-SM, SC	A-2-4, A-3	0	0	82-100	78-100	60-88	9-23	0-25	NP-9
	31-80	Stratified loamy sand to sand, sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SC-SM, SP-SM, SC	A-2-4, A-1-b	0	0	71-100	64-100	48-88	12-31	0-26	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
EveC:												
Evesboro--------	0-4	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-24	NP-5
	4-17	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	17-31	Sand, loamy sand	SP-SM, SC	A-2-4, A-3	0	0	82-100	78-100	60-88	9-23	0-25	NP-9
	31-80	Stratified loamy sand to sand, sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SC-SM, SP-SM, SC	A-2-4, A-1-b	0	0	71-100	64-100	48-88	12-31	0-26	NP-10
EveE:												
Evesboro--------	0-4	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-24	NP-5
	4-17	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	17-31	Sand, loamy sand	SP-SM, SC	A-2-4, A-3	0	0	82-100	78-100	60-88	9-23	0-25	NP-9
	31-80	Stratified loamy sand to sand, sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SC-SM, SP-SM, SC	A-2-4, A-1-b	0	0	71-100	64-100	48-88	12-31	0-26	NP-10
EvuB:												
Evesboro--------	0-4	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-24	NP-5
	4-17	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	17-31	Sand, loamy sand	SP-SM, SC	A-2-4, A-3	0	0	82-100	78-100	60-88	9-23	0-25	NP-9
	31-80	Stratified loamy sand to sand, sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SC-SM, SP-SM, SC	A-2-4, A-1-b	0	0	71-100	64-100	48-88	12-31	0-26	NP-10
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
FamA:												
Fallsington-----	0-2	Mucky peat	PT	A-8	0	0	85-100	84-100	60-80	29-44	---	---
	2-5	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-35	3-10
	5-8	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	8-14	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	14-31	Sandy clay loam, loam	SC, CL	A-2-6, A-7-6, A-6	0	0	84-100	83-100	66-96	33-57	27-44	12-25
	31-62	Sand, loamy sand, sandy loam	SM, SC	A-2-6, A-2-4	0	0	80-100	79-100	62-94	13-32	0-30	NP-12
	62-80	Gravelly sand, gravelly loamy sand, gravelly sandy loam	SP-SM, SC	A-2-6, A-2-4	0	0	73-79	71-78	55-73	11-25	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
FapA:												
Fallsington-----	0-2	Mucky peat	PT	A-8	0	0	84-100	83-100	66-100	45-74	---	---
	2-5	Loam	CL, SM, ML	A-4, A-7-6	0	0	84-100	83-100	66-100	45-74	20-45	3-18
	5-8	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	8-14	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	14-31	Sandy clay loam, loam	SC, CL	A-2-6, A-7-6, A-6	0	0	84-100	83-100	66-96	33-57	27-44	12-25
	31-62	Sand, loamy sand, sandy loam	SM, SC	A-2-6, A-2-4	0	0	80-100	79-100	62-94	13-32	0-30	NP-12
	62-80	Gravelly sand, gravelly loamy sand, gravelly sandy loam	SP-SM, SC	A-2-6, A-2-4	0	0	73-79	71-78	55-73	11-25	0-30	NP-12
FauB:												
Fallsington-----	0-2	Mucky peat	PT	A-8	0	0	85-100	84-100	60-80	29-44	---	---
	2-5	Sandy loam	SC-SM, SM	A-4, A-2-4	0	0	85-100	84-100	60-80	29-44	19-35	3-10
	5-8	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	8-14	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	14-31	Sandy clay loam, loam	SC, CL	A-2-6, A-7-6, A-6	0	0	84-100	83-100	66-96	33-57	27-44	12-25
	31-62	Sand, loamy sand, sandy loam	SM, SC	A-2-4, A-2-6	0	0	80-100	79-100	62-94	13-32	0-30	NP-12
	62-80	Gravelly sand, gravelly loamy sand, gravelly sandy loam	SP-SM, SC	A-2-4, A-2-6	0	0	73-79	71-78	55-73	11-25	0-30	NP-12
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
FmhAt:												
Fluvaquents, loamy, frequently flooded--------	0-5	Loam, silt loam	CL, SM, ML	A-4, A-7-6	0	0-5	95-100	74-100	60-100	43-78	22-45	3-18
	5-12	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6	0	0-5	95-100	76-100	68-100	55-87	22-38	7-19
	12-18	Sandy clay loam	SC, CL	A-6, A-7-6, A-2-6	0	0-11	90-100	57-100	44-92	26-60	29-44	13-25
	18-24	Sandy clay loam	CL, SC	A-6, A-7-6, A-2-6	0	0-11	90-100	57-100	44-92	26-60	29-44	13-25
	24-60	Sandy loam	CL, SM, SC-SM	A-1-b, A-4	0-1	0-10	90-100	59-100	42-81	24-51	16-27	2-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
FrfB:												
Freehold--------	0-10	Loamy sand	SM, SC	A-4, A-2-4	0	0	93-100	92-100	70-88	25-38	0-30	NP-9
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrfC:												
Freehold--------	0-10	Loamy sand	SM, SC	A-4, A-2-4	0	0	93-100	92-100	70-88	25-38	0-30	NP-9
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkA:												
Freehold--------	0-10	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkB:												
Freehold--------	0-10	Sandy loam	SM, SC-SM, SC	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkC:												
Freehold--------	0-10	Sandy loam	SM, SC-SM, SC	A-2-4, A-4	0	0	85-100	84-100	60-80	29-44	19-33	3-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
FrkD:												
Freehold--------	0-7	Sandy loam, sandy clay loam	CL, SC	A-2-4, A-6	0	0	93-100	92-100	65-88	32-52	24-37	9-19
	7-11	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	11-18	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	18-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkD2:												
Freehold, eroded	0-7	Sandy loam, sandy clay loam	SC, CL	A-2-4, A-6	0	0	93-100	92-100	65-88	32-52	24-37	9-19
	7-11	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	11-18	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	18-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SC-SM, SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkE:												
Freehold--------	0-10	Sandy loam, loamy sand	SM, SC-SM, SC	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SC-SM, SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
FrkF:												
Freehold--------	0-8	Sandy loam, loamy sand	SC, SC-SM, SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	8-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy sandy loam	SC, SC-SM, SM	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
FrrB:												
Freehold--------	0-10	Sandy loam, loamy sand	SC, SM, SC-SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SC-SM, SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
FrrC:												
Freehold--------	0-10	Sandy loam, loamy sand	SC-SM, SC, SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SC-SM, SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
HbmB:												
Hammonton-------	0-8	Loamy sand	SM, SC	A-2-4, A-4	0	0	78-100	78-100	60-88	21-38	0-32	NP-9
	8-18	Loamy sand, gravelly loamy sand	SM, SC	A-2-4, A-4	0	0	70-100	70-100	54-88	19-38	0-27	NP-9
	18-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	70-100	70-100	50-81	26-46	17-28	3-10
	36-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-1-b, A-2-4	0	0	54-100	54-100	42-88	6-23	0-25	NP-9
HbrB:												
Hammonton-------	0-8	Loamy sand	SM, SC	A-2-4, A-4	0	0	78-100	78-100	60-88	21-38	0-32	NP-9
	8-18	Loamy sand, gravelly loamy sand	SM, SC	A-2-4, A-4	0	0	70-100	70-100	54-88	19-38	0-27	NP-9
	18-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	70-100	70-100	50-81	26-46	17-28	3-10
	36-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-1-b, A-2-4	0	0	54-100	54-100	42-88	6-23	0-25	NP-9
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
JdrA:												
Jade Run--------	0-11	Fine sandy loam	SM, ML	A-4	0	0	93-100	92-100	79-99	39-55	0-37	NP-10
	11-19	Very fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	93-100	91-100	84-100	52-70	17-31	2-12
	19-23	Very fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	93-100	91-100	84-100	52-70	17-31	2-12
	23-28	Very fine sandy loam, fine sandy loam, sandy loam	CL-ML, CL, ML	A-4, A-6	0	0	93-100	91-100	88-100	55-73	16-30	2-12
	28-35	Very fine sandy loam, fine sandy loam, sandy loam	CL-ML, CL, ML	A-4, A-6	0	0	93-100	91-100	88-100	55-73	16-30	2-12
	35-52	Very fine sandy loam, loamy fine sand, loamy very fine sand	CL-ML, CL, ML	A-4, A-6	0	0	93-100	91-100	86-100	53-73	0-29	NP-12
	52-65	Sand, loamy sand	SM, SP-SM, SC	A-3, A-2-4	0	0	81-100	78-100	59-87	8-23	0-26	NP-9
	65-80	Sand, coarse sand, loamy coarse sand, stratified gravelly coarse sand to gravelly sand to gravelly loamy coarse sand	SP-SM, SC	A-2-4, A-1-b	0	0	67-100	65-100	50-89	7-23	0-26	NP-9
JduA:												
Jade Run--------	0-11	Fine sandy loam	SM, ML	A-4	0	0	93-100	92-100	79-99	39-55	0-37	NP-10
	11-19	Very fine sandy loam, loam, silt loam	ML, CL-ML, CL	A-4, A-6	0	0	93-100	91-100	84-100	52-70	17-31	2-12
	19-23	Very fine sandy loam, loam, silt loam	ML, CL-ML, CL	A-4, A-6	0	0	93-100	91-100	84-100	52-70	17-31	2-12
	23-28	Very fine sandy loam, fine sandy loam, sandy loam	CL-ML, CL, ML	A-4, A-6	0	0	93-100	91-100	88-100	55-73	16-30	2-12
	28-35	Very fine sandy loam, fine sandy loam, sandy loam	CL-ML, ML, CL	A-4, A-6	0	0	93-100	91-100	88-100	55-73	16-30	2-12
	35-52	Very fine sandy loam, loamy fine sand, loamy very fine sand	CL-ML, CL, ML	A-4, A-6	0	0	93-100	91-100	86-100	53-73	0-29	NP-12
	52-65	Sand, loamy sand	SM, SP-SM, SC	A-3, A-2-4	0	0	81-100	78-100	59-87	8-23	0-26	NP-9
	65-80	Sand, coarse sand, loamy coarse sand, stratified gravelly coarse sand to gravelly sand to gravelly loamy coarse sand	SP-SM, SC	A-1-b, A-2-4	0	0	67-100	65-100	50-89	7-23	0-26	NP-9
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
KemB:												
Keyport---------	0-12	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	70-81	35-44	18-30	2-7
	12-18	Clay, clay loam	CL, CH	A-7-6	0	0	94-100	94-100	82-100	65-90	43-63	25-40
	18-24	Clay, silty clay	CL, CH	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	24-32	Clay, silty clay	CL, CH	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	32-41	Clay, silty clay loam	CL, CH	A-7-6, A-6	0	0	94-100	94-100	79-100	65-94	39-63	21-40
	41-55	Silty clay loam, clay loam	CL	A-7-6, A-6	0	0	95-100	95-100	91-100	83-100	37-50	19-29
	55-80	Silty clay loam, stratified silty clay loam to loamy sand	CL, ML	A-6, A-4, A-7-6	0	0	95-100	95-100	70-100	61-100	16-50	1-29
KemC2:												
Keyport, eroded-	0-9	Sandy loam, sandy clay loam	SC-SM, SC, CL	A-6, A-2-4, A-4	0	0	93-100	92-100	64-89	30-52	18-38	4-19
	9-15	Clay, clay loam	CH, CL	A-7-6	0	0	94-100	94-100	82-100	65-90	43-63	25-40
	15-21	Clay, silty clay	CH, CL	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	21-32	Clay, silty clay	CH, CL	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	32-41	Clay, silty clay loam	CL, CH	A-7-6, A-6	0	0	94-100	94-100	79-100	65-94	39-63	21-40
	41-55	Silty clay loam, clay loam	CL	A-6, A-7-6	0	0	95-100	95-100	91-100	83-100	37-50	19-29
	55-80	Silty clay loam, stratified silty clay loam to loamy sand	CL, ML	A-6, A-4, A-7-6	0	0	95-100	95-100	70-100	61-100	16-50	1-29
KeoA:												
Keyport---------	0-12	Loam	CL, SM	A-4, A-7-6	0	0	95-100	90-100	71-100	49-74	20-43	3-18
	12-18	Clay, clay loam	CH, CL	A-7-6	0	0	94-100	94-100	82-100	65-90	43-63	25-40
	18-24	Clay, silty clay	CH, CL	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	24-32	Clay, silty clay	CH, CL	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	32-41	Clay, silty clay loam	CL, CH	A-7-6, A-6	0	0	94-100	94-100	79-100	65-94	39-63	21-40
	41-55	Silty clay loam, clay loam	CL	A-7-6, A-6	0	0	95-100	95-100	91-100	83-100	37-50	19-29
	55-80	Silty clay loam, stratified silty clay loam to loamy sand	CL, ML	A-6, A-4, A-7-6	0	0	95-100	95-100	70-100	61-100	16-50	1-29
KeuB:												
Keyport---------	0-12	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	70-81	35-44	18-30	2-7
	12-18	Clay, clay loam	CL, CH	A-7-6	0	0	94-100	94-100	82-100	65-90	43-63	25-40
	18-24	Clay, silty clay	CL, CH	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	24-32	Clay, silty clay	CL, CH	A-7-6	0	0	94-100	94-100	80-100	72-92	48-63	28-40
	32-41	Clay, silty clay loam	CL, CH	A-7-6, A-6	0	0	94-100	94-100	79-100	65-94	39-63	21-40
	41-55	Silty clay loam, clay loam	CL	A-7-6, A-6	0	0	95-100	95-100	91-100	83-100	37-50	19-29
	55-80	Silty clay loam, stratified silty clay loam to loamy sand	CL, ML	A-6, A-4, A-7-6	0	0	95-100	95-100	70-100	61-100	16-50	1-29

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
KeuB:												
Urban land	---	---	---	---	---	---	---	---	---	---	---	---
KreA:												
Kresson	0-6	Fine sandy loam	SC-SM, SC, SM	A-4, A-2-4	0	0	79-100	78-100	67-98	30-50	0-30	NP-10
	6-18	Clay, sandy clay loam	SC, CL, CH	A-7-6, A-6	0	0	77-100	75-100	54-100	39-87	31-63	13-40
	18-33	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	33-41	Clay, clay loam	SC, CL, CH	A-7-6, A-6	0	0	77-100	75-100	60-100	45-82	37-58	19-36
	41-80	Stratified sandy loam to sandy clay loam	SC-SM, SC, CL	A-6, A-1-b, A-7-6	0	0	79-100	77-100	50-91	22-54	18-43	4-24
LakB:												
Lakehurst	0-2	Slightly decomposed plant material	PT	A-8	0	0	81-100	79-100	60-83	9-18	---	---
	2-4	Sand	SP-SM, SM	A-2-4, A-3	0	0	81-100	79-100	60-83	9-18	0-28	NP-5
	4-18	Sand, fine sand	SP-SM, SC-SM	A-2-4, A-3	0	0	81-100	79-100	60-83	9-18	0-21	NP-5
	18-32	Sand, loamy sand, fine sand	SP-SM, SC	A-2-4, A-3	0	0	80-100	78-100	60-88	9-23	0-28	NP-9
	32-45	Sand, loamy sand, fine sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-88	8-23	0-26	NP-9
	45-54	Sand, gravelly sand, loamy sand, gravelly loamy sand	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-90	8-25	0-27	NP-10
	54-80	Sand, gravelly sand, sandy loam, gravelly sandy loam	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-90	8-25	0-27	NP-10
LasB:												
Lakewood	0-3	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-25	NP-5
	3-11	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	11-13	Loamy sand	SM, SC	A-2-4	0	0	82-100	78-100	59-86	17-33	0-28	NP-9
	13-30	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	30-46	Sand, gravelly sand	SP-SM, SC-SM	A-1-b, A-2-4	0	0	67-100	59-100	45-83	6-18	0-21	NP-5
	46-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-1-b, A-2-4	0	0	67-100	59-100	45-88	6-23	0-26	NP-9
LatvB:												
Lakewood	0-3	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-25	NP-5
	3-11	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	11-13	Loamy sand	SM, SC	A-2-4	0	0	82-100	78-100	59-86	17-33	0-28	NP-9
	13-30	Sand	SP-SM, SC-SM	A-3, A-2-4	0	0	83-100	79-100	60-83	9-18	0-21	NP-5
	30-46	Sand, gravelly sand	SP-SM, SC-SM	A-1-b, A-2-4	0	0	67-100	59-100	45-83	6-18	0-21	NP-5
	46-80	Sand, loamy sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-1-b, A-2-4	0	0	67-100	59-100	45-88	6-23	0-26	NP-9

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
LatvB:												
Quakerbridge----	0-2	Slightly decomposed plant material	PT	A-8	0	0	81-100	79-100	60-83	9-18	---	---
	2-3	Sand	SP-SM, SM	A-3, A-2-4	0	0	81-100	79-100	60-83	9-18	0-28	NP-5
	3-20	Sand, fine sand	SP-SM, SC-SM	A-3, A-2-4	0	0	81-100	79-100	60-83	9-18	0-21	NP-5
	20-24	Loamy sand, sand, fine sand	SM, SC	A-2-4	0	0	80-100	78-100	59-86	17-32	0-28	NP-9
	24-42	Sand, loamy sand, fine sand, gravelly sand, gravelly loamy sand	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-88	8-23	0-26	NP-9
	42-54	Sand, gravelly sand, loamy sand, gravelly loamy sand	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-90	8-25	0-27	NP-10
	54-80	Sand, gravelly sand, sandy loam, gravelly sandy loam	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-90	8-25	0-27	NP-10
LenA:												
Lenni-----------	0-5	Loam	CL, ML, SM	A-4, A-7-6	0	0	92-100	91-100	73-100	49-74	20-45	3-18
	5-10	Clay loam, loam	CL	A-7-6, A-6	0	0	92-100	91-100	75-97	59-80	35-50	17-29
	10-18	Clay, silty clay	CH, CL	A-7-6	0	0	91-100	90-100	77-100	70-92	48-63	28-40
	18-33	Clay loam, silty clay loam	CL	A-7-6, A-6	0	0	92-100	91-100	77-97	61-80	37-50	19-29
	33-45	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	92-100	92-100	66-81	34-46	17-27	3-10
	45-80	Sandy loam, loamy sand, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	92-100	92-100	66-79	29-39	16-25	2-7
MakAt:												
Manahawkin, frequently flooded--------	0-13	Muck	PT	A-8	0	0	38-100	34-100	26-88	4-23	---	---
	13-26	Muck	PT	A-8	0	0	38-100	34-100	26-88	4-23	---	---
	26-47	Muck	PT	A-8	0	0	38-100	34-100	26-88	4-23	---	---
	47-80	Sand, loamy sand, gravelly sand, gravelly loamy sand, very gravelly sand	SP-SM, GP, SC	A-1-a, A-2-4	0	0	38-100	34-100	26-88	4-23	0-28	NP-9

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MamnAv:												
Mannington, very frequently flooded--------	0-14	Mucky silt loam	OH, OL	A-5, A-7-5	0	0	82-100	81-100	80-100	66-88	44-70	7-11
	14-32	Silt loam, silty clay loam, mucky silt loam	MH, CL, OH	A-6, A-7-5	0	0	92-100	91-100	86-100	80-100	35-82	13-22
	32-42	Muck	PT	A-8	0	0	82-100	81-100	79-100	66-88	---	---
	42-52	Mucky peat	PT	A-8	0	0	82-100	81-100	79-100	66-88	---	---
	52-62	Mucky silt loam	OH, OL	A-5, A-7-5	0	0	82-100	81-100	79-100	66-88	44-70	7-11
	62-90	Silt loam, silty clay loam, stratified sandy loam to silt loam to silty clay loam	ML, CL, MH	A-4, A-5, A-7-5	0	0	92-100	91-100	89-100	75-100	28-59	9-23
Nanticoke, very frequently flooded--------	0-5	Mucky silt loam	OH, OL	A-5	0	0	98-100	98-100	94-100	82-90	41-68	4-9
	5-50	Silt loam	CL, ML	A-6, A-7-6	0	0	98-100	98-100	95-100	82-91	28-45	12-17
	50-80	Silt loam, silty clay loam	MH, CL, CL-ML	A-4, A-7-6	0	0	98-100	98-100	93-100	78-100	23-57	7-27
MamuAv:												
Mannington, very frequently flooded--------	0-14	Mucky silt loam	OH, OL	A-5, A-7-5	0	0	82-100	81-100	80-100	66-88	44-70	7-11
	14-32	Silt loam, silty clay loam, mucky silt loam	MH, CL, OH	A-7-5, A-6	0	0	92-100	91-100	86-100	80-100	35-82	13-22
	32-42	Muck	PT	A-8	0	0	82-100	81-100	80-100	66-88	---	---
	42-52	Mucky peat	PT	A-8	0	0	82-100	81-100	80-100	66-88	---	---
	52-62	Mucky silt loam	OH, OL	A-5, A-7-5	0	0	82-100	81-100	80-100	66-88	44-70	7-11
	62-90	Silt loam, silty clay loam, stratified sandy loam to silt loam to silty clay loam	ML, CL, MH	A-5, A-4, A-7-5	0	0	92-100	91-100	89-100	75-100	28-59	9-23
Nanticoke, very frequently flooded--------	0-5	Mucky silt loam	OH, OL	A-5	0	0	98-100	98-100	94-100	82-90	41-68	4-9
	5-50	Silt loam	CL, ML	A-6, A-7-6	0	0	98-100	98-100	95-100	82-91	28-45	12-17
	50-80	Silt loam, silty clay loam	CL-ML, CL, MH	A-4, A-7-6	0	0	98-100	98-100	93-100	78-100	23-57	7-27
Udorthents------	0-60	Silt loam	ML, CL-ML	A-4, A-7-6	0	0	100	100	93-100	85-100	28-47	7-18

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
MaoB:												
Marlton---------	0-10	Sandy loam	SC-SM, SM	A-4, A-2-4	0	0	79-100	78-100	58-81	29-44	18-30	2-7
	10-20	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	20-28	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	28-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, CL, SC-SM	A-6, A-1-b, A-7-6	0	0	71-100	69-100	45-91	19-54	18-42	4-24
MaoC:												
Marlton---------	0-10	Sandy loam	SC-SM, SM	A-4, A-2-4	0	0	79-100	78-100	58-81	29-44	18-30	2-7
	10-20	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	20-28	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	28-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, CL, SC-SM	A-6, A-7-6, A-1-b	0	0	71-100	69-100	45-91	19-54	18-42	4-24
MaoC2:												
Marlton, eroded-	0-7	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	7-17	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	17-25	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	25-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, CL, SC-SM	A-6, A-7-6, A-1-b	0	0	71-100	69-100	45-91	19-54	18-42	4-24

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
MaoD:												
Marlton---------	0-10	Sandy loam	SC-SM, SM	A-4, A-2-4	0	0	79-100	78-100	58-81	29-44	18-30	2-7
	10-20	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	20-28	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	28-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, SC-SM, CL	A-6, A-7-6, A-1-b	0	0	71-100	69-100	45-91	19-54	18-42	4-24
MaoD2:												
Marlton, eroded-	0-7	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	7-17	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	17-25	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	25-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, CL, SC-SM	A-6, A-7-6, A-1-b	0	0	71-100	69-100	45-91	19-54	18-42	4-24
MauB:												
Marlton---------	0-10	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	10-20	Clay, clay loam	CH, SC	A-6, A-7-6	0	0	77-100	75-100	57-99	41-78	37-58	19-36
	20-28	Clay, sandy clay	CH, SC	A-7-6	0	0	77-100	75-100	55-93	41-75	44-63	25-40
	28-47	Clay, sandy clay, sandy clay loam, gravelly clay, gravelly sandy clay, gravelly sandy clay loam	CL, CH, SC	A-7-6, A-6	0	0	69-100	67-100	51-100	37-80	35-58	17-36
	47-80	Stratified sandy loam to sandy clay loam, stratified gravelly sandy loam to gravelly sandy clay loam	SC, CL, SC-SM	A-6, A-1-b, A-7-6	0	0	71-100	69-100	45-91	19-54	18-42	4-24

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MauB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
MumA:												
Mullica---------	0-2	Mucky peat	PT	A-8	0	0	79-100	78-100	58-83	28-45	---	---
	2-9	Sandy loam	SM	A-2-4, A-4	0	0	79-100	78-100	58-83	28-45	21-35	3-10
	9-14	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	14-28	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	28-31	Loamy sand, sand, stratified sand to loamy sand	SM, SC	A-2-4, A-4	0	0	80-100	79-100	60-88	20-38	0-26	NP-9
	31-40	Loamy sand, sand, stratified sand to loamy sand	SP-SM, SC	A-2-4, A-3	0	0	80-100	79-100	60-88	9-23	0-26	NP-9
	40-80	Gravelly loamy sand, gravelly sand, loamy sand, sand	SM, GM, SC	A-4, A-1-b	0	0	54-95	54-95	41-83	14-36	0-25	NP-9
OTKA:												
Othello---------	0-1	Mucky peat	PT	A-8	0	0	92-100	91-100	88-100	72-89	---	---
	1-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	92-100	91-100	88-100	72-89	21-33	4-12
	13-32	Silt loam	CL	A-6, A-4	0	0	84-100	83-100	79-100	68-94	24-38	9-19
	32-40	Silty clay loam	CL	A-7-6, A-6	0	0	84-100	83-100	76-100	69-95	37-50	19-28
	40-60	Loamy sand, gravelly loamy sand	SM, SC	A-2-4, A-4	0	0	72-100	70-100	54-88	19-38	0-26	NP-9
	60-80	Sand, gravelly sand	SP-SM, SC-SM	A-3, A-2-4	0	0	73-100	71-100	54-83	8-18	0-22	NP-5
Fallsington-----	0-2	Mucky peat	PT	A-8	0	0	84-100	83-100	66-100	45-74	---	---
	2-5	Loam	CL, ML, SM	A-4, A-7-6	0	0	84-100	83-100	66-100	45-74	20-45	3-18
	5-8	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	8-14	Sandy loam	SC	A-2-6, A-6	0	0	85-100	84-100	65-79	34-42	27-32	12-13
	14-31	Sandy clay loam, loam	SC, CL	A-2-6, A-7-6, A-6	0	0	84-100	83-100	66-96	33-57	27-44	12-25
	31-62	Sand, loamy sand, sandy loam	SM, SC	A-2-6, A-2-4	0	0	80-100	79-100	62-94	13-32	0-30	NP-12
	62-80	Gravelly sand, gravelly loamy sand, gravelly sandy loam	SP-SM, SC	A-2-4, A-2-6	0	0	73-79	71-78	55-73	11-25	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
PEEAR:												
Pedricktown, rarely flooded-	0-2	Mucky peat	PT	A-8	0	0	84-100	83-100	75-100	61-83	---	---
	2-9	Silt loam	ML, CL-ML	A-4, A-7-5	0	0	84-100	83-100	75-100	61-83	25-46	4-12
	9-22	Sandy loam	SC	A-6, A-2-6	0	0	85-100	84-100	64-79	34-42	29-35	12-13
	22-36	Loamy sand	SM, SC	A-2-4, A-4	0	0	85-100	84-100	65-88	22-38	0-26	NP-9
	36-40	Sandy clay loam, sandy loam, loam	SC, SM, CL	A-6, A-2-4, A-7-6	0	0	84-100	83-100	59-99	25-58	18-44	3-25
	40-49	Sandy loam	SC	A-6, A-2-6	0	0	85-100	84-100	64-79	34-42	29-35	12-13
	49-56	Loamy sand	SM, SC	A-2-4, A-4	0	0	85-100	84-100	65-88	22-38	0-26	NP-9
	56-72	Sand, loamy sand	SP-SM, SM, SC	A-3, A-2-4	0	0	85-100	85-100	64-88	9-23	0-26	NP-9
Askecksy, rarely flooded--------	0-9	Loamy sand	SM	A-2-4, A-4	0	0	80-100	78-100	60-88	21-38	0-36	NP-9
	9-11	Sand	SP-SM, SC-SM	A-2-4, A-3	0	0	80-100	79-100	60-83	9-18	0-23	NP-5
	11-28	Sand, fine sand	SP-SM, SC-SM	A-2-4, A-3	0	0	80-100	79-100	60-83	9-18	0-23	NP-5
	28-31	Sand, coarse sand	SP-SM, SC-SM	A-2-4, A-3	0	0	80-100	79-100	60-83	9-18	0-23	NP-5
	31-80	Sand, coarse sand, gravelly sand, gravelly coarse sand	SP-SM, SC-SM	A-2-4, A-3	0	0	73-100	71-100	54-83	8-18	0-23	NP-5
Mullica, rarely flooded--------	0-2	Mucky peat	PT	A-8	0	0	79-100	78-100	58-83	28-45	---	---
	2-9	Sandy loam	SM	A-2-4, A-4	0	0	79-100	78-100	58-83	28-45	21-35	3-10
	9-14	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	14-28	Sandy loam	SC-SM, SC, SM	A-2-4, A-4	0	0	79-100	78-100	56-81	29-46	19-31	3-10
	28-31	Loamy sand, sand, stratified sand to loamy sand	SM, SC	A-2-4, A-4	0	0	80-100	79-100	60-88	20-38	0-26	NP-9
	31-40	Loamy sand, sand, stratified sand to loamy sand	SP-SM, SC	A-2-4, A-3	0	0	80-100	79-100	60-88	9-23	0-26	NP-9
	40-80	Gravelly loamy sand, gravelly sand, loamy sand, sand	SM, SC, GM	A-4, A-1-b	0	0	54-95	54-95	41-83	14-36	0-25	NP-9
PHG:												
Pits, sand and gravel---------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
SabB:												
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
SabC:												
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
SabD:												
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SM, SC-SM, SC	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
SabF:												
Sassafras-------	0-12	Loamy sand	SC, SM	A-2-4, A-4	0	0	81-100	78-100	60-88	21-38	0-30	NP-9
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
SacA:												
Sassafras-------	0-12	Sandy loam	SM, SC, SC-SM	A-2-4, A-4	0	0	79-100	78-100	59-84	29-47	18-32	3-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SM, SC-SM, SC	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
SacB:												
Sassafras-------	0-12	Sandy loam	SC, SM, SC-SM	A-2-4, A-4	0	0	79-100	78-100	59-84	29-47	18-32	3-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
SacC:												
Sassafras-------	0-12	Sandy loam	SC, SM, SC-SM	A-2-4, A-4	0	0	79-100	78-100	59-84	29-47	18-32	3-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
SacD:												
Sassafras-------	0-12	Sandy loam	SC, SM, SC-SM	A-2-4, A-4	0	0	79-100	78-100	59-84	29-47	18-32	3-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SP-SM, SC	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
SapB:												
Sassafras-------	0-12	Sandy loam, loamy sand	SC-SM, SC, SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-32	NP-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
ThfB:												
Tinton----------	0-12	Sand, fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0	92-100	92-100	70-81	10-16	0-22	NP-4
	12-26	Fine sand, loamy fine sand	SC, SM, SP-SM	A-2-4	0	0	93-100	92-100	84-100	12-26	0-27	NP-9
	26-38	Fine sandy loam, sandy loam, sandy clay loam	SC, CL	A-6	0	0	93-100	92-100	85-100	40-53	27-37	12-19
	38-50	Sand, loamy sand	SP-SM, SC	A-2-4, A-3	0	0	73-100	71-100	55-88	8-23	0-25	NP-9
	50-80	Fine sandy loam, loamy sand, stratified sand to fine sandy loam, gravelly loamy sand, stratified gravelly sand to gravelly fine sandy loam	SC-SM, SC, SM	A-2-4, A-4, A-6	0	0	72-100	70-100	60-100	23-49	0-29	NP-12
UdauB:												
Udorthents------	0-12	Loam	CL, ML, GW	A-6, A-4, A-1-a	0-52	0	11-100	8-100	6-92	4-68	25-37	6-12
	12-72	Sandy loam, fine sandy loam, loamy sand, loam, sand	SM, SC, GW	A-2-4, A-1-a, A-6	0-52	0	12-100	8-100	5-97	1-43	0-31	NP-12
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
UddB:												
Udorthents, dredged materials------	0-12	Loam	GW, CL, ML	A-6, A-4, A-1-a	0-52	0	11-100	8-100	6-92	4-68	25-36	6-11
	12-72	Sand, sandy loam, fine sandy loam, loamy sand, loam	GW, CL, SM	A-4, A-1-a, A-6	0-62	0	12-100	8-100	5-97	2-53	0-29	NP-11
UddcB:												
Udorthents, dredged coarse materials------	0-12	Loam	GW, ML, CL	A-1-a, A-4, A-6	0-52	0	11-100	8-100	6-92	4-68	25-36	6-11
	12-72	Sand, loam, loamy sand, fine sandy loam, sandy loam	SP-SM, GW, SC	A-3, A-1-a, A-2-6	0-62	0	12-100	8-100	5-96	0-33	0-29	NP-11
UddfB:												
Udorthents, dredged fine materials------	0-12	Loam	ML, CL-ML	A-4, A-7-6	0	0	100	90-97	75-97	52-76	22-45	3-18
	12-72	Silty clay loam, sandy clay loam, clay	CH, SC	A-7-6, A-6	0	0	89-100	74-100	51-100	42-100	33-73	17-51
UddrB:												
Udorthents, dredged materials------	0-12	Loam	ML, CL, GW	A-1-a, A-4, A-6	0-52	0	11-100	8-100	6-92	4-68	25-36	6-11
	12-72	Sand, loamy sand, fine sandy loam, sandy loam, loam	SM, GW, CL	A-4, A-1-a, A-6	0-62	0	12-100	8-100	5-97	2-53	0-29	NP-11
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
UdrB:												
Udorthents, refuse substratum-----	0-60	Silt loam	ML, CL-ML	A-4, A-7-6	0	0	100	100	93-100	85-100	28-47	7-18
UR:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
USAURB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
USAURB:												
Aura------------	0-8	Sandy loam, coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6	0	0	71-92	70-92	53-77	26-43	20-33	4-11
	8-13	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC, SC-SM	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	13-22	Coarse sandy loam, sandy loam, gravelly coarse sandy loam, gravelly sandy loam	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	71-92	70-92	43-64	25-41	18-28	4-11
	22-28	Gravelly coarse sandy loam, gravelly sandy loam, very gravelly coarse sandy loam, very gravelly sandy loam	GC-GM, SC	A-2-4, A-1-a, A-2-6	0	0	41-79	38-78	22-52	13-34	18-28	4-11
	28-44	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	44-59	Gravelly sandy clay loam, very gravelly sandy clay loam	SC, GC	A-7-6, A-2-6	0	0	41-78	37-77	31-76	17-46	29-43	13-24
	59-80	Gravelly loamy coarse sand, gravelly coarse sand, gravelly coarse sandy loam, very gravelly coarse sandy loam, very gravelly coarse sand, very gravelly loamy coarse sand	SC-SM, SC, GP-GM	A-1-a, A-1-b, A-2-6	0	0	41-79	38-78	19-50	6-24	0-28	NP-11
USDOWB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
Downer----------	0-10	Sandy loam, loamy sand	SM, SC, SC-SM	A-4, A-2-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-16	Sandy loam, gravelly sandy loam	SM, SC-SM, SC	A-4, A-1-b	0	0	66-100	64-100	46-81	23-46	17-27	3-10
	16-36	Sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-4, A-1-b	0	0	65-100	63-100	46-81	23-46	17-27	3-10
	36-48	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4, A-1-b, A-4	0	0	66-100	64-100	49-89	17-39	0-26	NP-10
	48-80	Stratified sand to sandy loam, stratified gravelly sand to gravelly sandy loam	SP-SM, SC	A-2-4, A-1-b	0	0	66-100	64-100	48-87	5-20	0-26	NP-10

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
USFREB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
Freehold--------	0-10	Sandy loam, loamy sand	SC, SC-SM, SM	A-2-4, A-4	0	0	93-100	92-100	63-80	29-44	0-31	NP-10
	10-14	Sandy loam	SC	A-6	0	0	93-100	92-100	71-79	37-42	27-31	12-13
	14-21	Sandy clay loam, loam	SC, CL	A-6, A-7-6	0	0	93-100	91-100	75-99	38-59	27-44	12-25
	21-35	Sandy loam, sandy clay loam	SC	A-6	0	0	93-100	92-100	70-86	37-49	27-37	12-19
	35-80	Loamy sand, stratified loamy sand to sandy loam, sandy loam	SM, SC-SM, SC	A-2-4	0	0	93-100	92-100	70-89	20-35	0-27	NP-10
USSASB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
Sassafras-------	0-12	Sandy loam, loamy sand	SC, SC-SM, SM	A-2-4, A-4	0	0	93-100	92-100	63-80	29-44	0-32	NP-10
	12-18	Sandy loam, gravelly sandy loam	SC	A-2-6, A-6	0	0	71-100	70-100	54-79	28-42	27-32	12-13
	18-28	Sandy clay loam, gravelly sandy clay loam	SC, CL	A-2-6, A-7-6, A-6	0	0	71-100	69-100	55-93	31-58	29-43	13-24
	28-40	Loamy sand, sandy loam, gravelly loamy sand, gravelly sandy loam	SC, SC-SM, SM	A-2-4	0	0	72-100	70-100	53-89	15-35	0-28	NP-10
	40-58	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
	58-80	Sand, loamy sand, sandy loam, gravelly sandy loam, gravelly loamy sand, gravelly sand	SM, SC, SP-SM	A-1-b, A-2-4, A-2-6	0	0	61-100	59-100	46-94	9-32	0-30	NP-12
USWESB:												
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SC-SM, SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
WeeB:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SC-SM, SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
WeeC:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SC-SM, SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
WeeD:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SC-SM, SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
WeeD2:												
Westphalia, eroded---------	0-4	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	4-13	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	13-28	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	28-48	Fine sand, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
WeeF:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
WehB:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
WehC:												
Westphalia------	0-6	Fine sandy loam, loamy fine sand	SM, CL	A-4, A-2-4	0	0	79-100	78-100	67-99	33-55	0-33	NP-10
	6-15	Fine sandy loam, very fine sandy loam	SC-SM, SM, CL	A-4	0	0	92-100	92-100	80-99	39-54	0-27	NP-10
	15-30	Loamy fine sand, fine sandy loam	SM, SC	A-4, A-2-4	0	0	92-100	92-100	85-100	30-43	0-26	NP-9
	30-48	Fine sand, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	92-100	85-100	13-22	0-21	NP-5
	48-80	Stratified fine sand to loamy fine sand, loamy very fine sand	SC-SM, SP-SM	A-2-4	0	0	92-100	92-100	82-96	11-20	0-21	NP-5
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---
WoeA:												
Woodstown-------	0-8	Sandy loam	SM, SC-SM	A-2-4, A-4	0	0	80-100	78-100	58-81	29-44	18-28	2-7
	8-26	Sandy loam	SC, SM	A-2-4, A-4, A-6	0	0	80-100	78-100	53-82	24-46	16-32	2-13
	26-30	Sandy clay loam	SC, CL	A-6, A-2-6, A-7-6	0	0	79-100	77-100	63-96	34-59	31-45	13-24
	30-36	Sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	80-100	78-100	53-82	24-46	16-31	2-13
	36-80	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4	0	0	73-100	70-100	52-86	15-33	0-26	NP-9
WoeB:												
Woodstown-------	0-8	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	78-100	58-81	29-44	18-28	2-7
	8-26	Sandy loam	SC, SM	A-2-4, A-4, A-6	0	0	80-100	78-100	53-82	24-46	16-32	2-13
	26-30	Sandy clay loam	SC, CL	A-6, A-7-6, A-2-6	0	0	79-100	77-100	63-96	34-59	31-45	13-24
	30-36	Sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	80-100	78-100	53-82	24-46	16-31	2-13
	36-80	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4	0	0	73-100	70-100	52-86	15-33	0-26	NP-9
WokA:												
Woodstown-------	0-8	Sandy loam	SM, SC-SM	A-2-4, A-4	0	0	80-100	78-100	58-81	29-44	18-28	2-7
	8-26	Sandy loam	SC, SM	A-2-4, A-4, A-6	0	0	80-100	78-100	53-82	24-46	16-32	2-13
	26-30	Sandy clay loam	SC, CL	A-6, A-2-6, A-7-6	0	0	79-100	77-100	63-96	34-59	29-43	13-24
	30-36	Sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	80-100	78-100	53-82	24-46	16-31	2-13
	36-80	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4	0	0	73-100	70-100	52-86	15-33	0-26	NP-9

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
WokA:												
Glassboro-------	0-11	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	84-100	62-81	31-44	18-28	2-7
	11-16	Sandy loam, fine sandy loam, loam	SC, SM	A-4, A-2-4, A-6	0	0	85-100	84-100	58-82	28-47	16-30	2-12
	16-21	Coarse sandy loam, sandy loam	SC-SM, SM	A-4, A-2-4	0	0	85-100	84-100	48-65	28-41	16-24	2-7
	21-26	Coarse sandy loam, sandy loam	SC-SM, SM	A-4, A-2-4	0	0	85-100	84-100	48-65	28-41	16-24	2-7
	26-40	Loamy coarse sand, loamy sand	SM, SC	A-2-4, A-1-b	0	0	80-100	78-100	43-65	17-33	0-26	NP-9
	40-56	Coarse sand, sand	SW-SM, SP-SM, SC-SM	A-1-b, A-2-4	0	0	81-100	79-100	36-52	8-17	0-22	NP-5
	56-80	Gravelly coarse sand, gravelly sand, gravelly loamy coarse sand, gravelly loamy sand	SW-SM, SP-SM, SC	A-1-b, A-2-4	0	0	68-80	66-79	30-45	7-17	0-26	NP-9
WooB:												
Woodstown-------	0-8	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	78-100	58-81	29-44	18-28	2-7
	8-26	Sandy loam	SC, SM	A-2-4, A-4, A-6	0	0	80-100	78-100	53-82	24-46	16-32	2-13
	26-30	Sandy clay loam	SC, CL	A-6, A-2-6, A-7-6	0	0	79-100	77-100	63-96	34-59	31-45	13-24
	30-36	Sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	80-100	78-100	53-82	24-46	16-31	2-13
	36-80	Loamy sand, sand, gravelly loamy sand, gravelly sand	SM, SC	A-2-4	0	0	73-100	70-100	52-86	15-33	0-26	NP-9
Urban land------	---	---	---	---	---	---	---	---	---	---	---	---

Table 19.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
AtsA:														
Atsion--------------	0-2	0-98	0-7	0-7	0.13-0.23	6-20	0.35-0.45	---	70-100	.05	.05	5	8	0
	2-4	85-96	2-12	2-9	1.10-1.30	6-20	0.05-0.09	0.0-2.9	2.0-4.0	.10	.10			
	4-26	85-96	2-12	2-9	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-0.0	.17	.17			
	26-34	70-96	2-25	2-14	1.55-1.70	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.17	.17			
	34-46	70-96	2-25	2-14	1.40-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.17	.17			
	46-51	85-96	2-12	2-9	1.40-1.60	6-20	0.03-0.06	0.0-2.9	0.0-0.0	.17	.17			
	51-80	70-96	2-25	3-14	1.40-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.0	.17	.17			
AtsAr:														
Atsion, rarely flooded------------	0-2	0-98	0-7	0-7	0.13-0.23	6-20	0.35-0.45	---	70-100	.05	.05	5	8	0
	2-4	85-96	2-12	2-9	1.10-1.30	6-20	0.05-0.09	0.0-2.9	2.0-4.0	.10	.10			
	4-26	85-96	2-12	2-9	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-0.0	.17	.17			
	26-34	70-96	2-25	2-14	1.55-1.70	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.17	.17			
	34-46	70-96	2-25	2-14	1.40-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.17	.17			
	46-51	85-96	2-12	2-9	1.40-1.60	6-20	0.03-0.06	0.0-2.9	0.0-0.0	.17	.17			
	51-80	70-96	2-25	3-14	1.40-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.0	.17	.17			
AucB:														
Aura----------------	0-7	71-89	4-29	3-11	1.55-1.65	2-20	0.05-0.08	0.0-2.9	0.5-2.0	.20	.20	3	2	134
	7-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.50-1.60	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-59	46-79	10-35	20-34	1.45-1.55	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
AugA:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
AugB:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
AugC:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
AupB:														
Aura----------------	0-8	23-52	28-50	8-17	1.20-1.50	2-6	0.12-0.17	0.0-2.9	1.0-3.0	.32	.32	3	5	56
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
AvsB:														
Aura----------------	0-7	71-89	4-29	3-11	1.55-1.65	2-20	0.05-0.08	0.0-2.9	0.5-2.0	.20	.20	3	2	134
	7-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
AvsC:														
Aura----------------	0-7	71-89	4-29	3-11	1.55-1.65	2-20	0.05-0.08	0.0-2.9	0.5-2.0	.20	.20	3	2	134
	7-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
AvsC:														
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
AvtB:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Sassafras-----------	0-12	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
AvtC:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Sassafras-----------	0-12	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
AvtC2:														
Aura, eroded--------	0-6	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	6-11	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	11-20	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	20-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Sassafras, eroded---	0-9	46-79	10-40	8-16	1.45-1.60	0.2-6	0.09-0.22	0.0-2.9	0.8-2.5	.24	.28	5	3	86
	9-15	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	15-25	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	25-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
AvuB:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
AvuC:														
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
BerAr:														
Berryland, rarely flooded------------	0-11	85-96	2-12	2-9	1.00-1.30	6-20	0.05-0.08	0.0-2.9	2.0-4.0	.10	.10	5	1	220
	11-19	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
	19-32	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.0	.10	.10			
	32-40	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.05	.10			
	40-44	70-96	2-25	2-14	1.40-1.60	2-20	0.03-0.08	0.0-2.9	0.0-0.0	.10	.10			
	44-80	60-96	0-30	2-15	1.50-1.70	2-20	0.03-0.13	0.0-2.9	0.0-0.0	.17	.17			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
BEXAS:														
Berryland, occasionally flooded------------	0-11	85-96	2-12	2-9	1.00-1.30	6-20	0.05-0.08	0.0-2.9	2.0-4.0	.10	.10	5	1	220
	11-19	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
	19-32	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.0	.10	.10			
	32-40	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.05	.10			
	40-44	70-96	2-25	2-14	1.40-1.60	2-20	0.03-0.08	0.0-2.9	0.0-0.0	.10	.10			
	44-80	60-96	0-30	2-15	1.40-1.60	2-20	0.03-0.13	0.0-2.9	0.0-0.0	.17	.17			
Mullica, occasionally flooded------------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.20	0.0-2.9	2.0-4.0	.28	.28			
	9-14	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	14-28	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	28-31	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	31-40	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	40-80	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.08	0.0-2.9	0.0-0.0	.05	.10			
BumA:														
Buddtown------------	0-9	50-84	15-49	3-18	1.50-1.60	0.6-2	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	5	3	86
	9-12	50-84	15-49	10-18	1.45-1.60	0.6-6	0.13-0.17	0.0-2.9	0.1-0.5	.43	.43			
	12-26	23-52	28-50	12-18	1.45-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.2	.32	.32			
	26-34	23-52	28-50	12-18	1.45-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.2	.32	.32			
	34-41	70-89	3-25	3-14	1.60-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.2	.15	.15			
	41-54	71-89	4-29	3-14	1.55-1.65	2-20	0.06-0.08	0.0-2.9	0.0-0.2	.20	.20			
	54-65	85-96	2-12	2-9	1.60-1.80	6-20	0.04-0.06	0.0-2.9	0.0-0.2	.10	.10			
	65-80	85-96	2-12	2-9	1.60-1.80	6-20	0.04-0.06	0.0-2.9	0.0-0.2	.10	.10			
Deptford------------	0-8	50-84	15-49	3-18	1.45-1.55	0.6-6	0.16-0.19	0.0-2.9	1.0-2.0	.37	.37	5	3	86
	8-12	50-84	15-49	10-18	1.45-1.55	0.6-6	0.13-0.17	0.0-2.9	0.1-0.5	.43	.43			
	12-22	20-52	28-75	12-18	1.45-1.55	0.2-2	0.16-0.21	0.0-2.9	0.0-0.2	.32	.32			
	22-46	50-84	15-49	10-18	1.45-1.60	0.6-6	0.11-0.17	0.0-2.9	0.0-0.2	.43	.43			
	46-50	45-89	3-49	3-18	1.45-1.65	0.2-6	0.09-0.15	0.0-2.9	0.0-0.2	.32	.32			
	50-62	45-89	3-49	3-18	1.45-1.65	0.2-6	0.09-0.15	0.0-2.9	0.0-0.2	.32	.32			
	62-80	45-89	3-49	3-18	1.55-1.65	0.2-20	0.04-0.17	0.0-2.9	0.0-0.2	.37	.37			
BuuB:														
Buddtown------------	0-9	50-84	15-49	3-18	1.50-1.60	0.6-2	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	5	3	86
	9-12	50-84	15-49	10-18	1.45-1.60	0.6-6	0.13-0.17	0.0-2.9	0.1-0.5	.43	.43			
	12-26	23-52	28-50	12-18	1.45-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.2	.32	.32			
	26-34	23-52	28-50	12-18	1.45-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.2	.32	.32			
	34-41	70-89	3-25	3-14	1.60-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.2	.15	.15			
	41-54	71-89	4-29	3-14	1.55-1.65	2-20	0.06-0.08	0.0-2.9	0.0-0.2	.20	.20			
	54-65	85-96	2-12	2-9	1.60-1.80	6-20	0.04-0.06	0.0-2.9	0.0-0.2	.10	.10			
	65-80	85-96	2-12	2-9	1.60-1.80	6-20	0.04-0.06	0.0-2.9	0.0-0.2	.10	.10			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
BuuB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
ChsAt:														
Chicone, frequently flooded-----------	0-5	20-50	50-80	12-18	1.45-1.55	0.2-2	0.15-0.30	0.0-2.9	2.0-5.0	.37	.37	5	5	56
	5-20	20-50	50-80	12-18	1.45-1.55	0.2-2	0.10-0.18	0.0-2.9	0.0-2.0	.43	.43			
	20-28	20-52	28-80	7-18	1.45-1.55	0.2-2	0.10-0.18	0.0-2.9	0.0-2.0	.43	.43			
	28-65	0-96	0-25	0-14	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05			
	65-80	70-96	2-25	2-14	1.55-1.70	2-20	0.05-0.10	0.0-2.9	0.0-1.0	.10	.10			
CoeAs:														
Colemantown, occasionally flooded-----------	0-10	23-52	28-50	7-27	1.45-1.55	0.2-2	0.18-0.24	0.0-2.9	2.0-5.0	.32	.32	3	5	56
	10-24	10-44	10-39	40-60	1.25-1.45	0.06-0.2	0.20-0.24	3.0-5.9	0.0-0.5	.20	.20			
	24-34	45-65	5-27	20-55	1.25-1.45	0.06-0.2	0.20-0.24	3.0-5.9	0.0-0.5	.10	.10			
	34-50	20-80	5-53	20-40	1.40-1.50	0.2-2	0.18-0.24	3.0-5.9	0.0-0.5	.20	.20			
	50-80	43-85	5-49	5-35	1.45-1.60	0.2-2	0.16-0.20	0.0-2.9	0.0-0.2	.20	.20			
CogB:														
Collington----------	0-9	71-89	4-29	3-14	1.55-1.65	2-20	0.05-0.08	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
CogC:														
Collington----------	0-9	71-89	4-29	3-14	1.55-1.65	2-20	0.05-0.08	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
CokA:														
Collington----------	0-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.14-0.22	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
CokB:														
Collington----------	0-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.14-0.22	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
CokC:														
Collington----------	0-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.14-0.22	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
CopB:														
Collington----------	0-9	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	9-22	23-80	10-50	18-30	1.45-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	22-30	20-52	15-53	18-35	1.40-1.55	0.2-2	0.12-0.16	3.0-5.9	0.0-0.2	.32	.32			
	30-38	55-75	17-42	5-15	1.50-1.60	0.6-6	0.05-0.15	0.0-2.9	0.0-0.2	.28	.28			
	38-43	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
	43-80	45-89	3-49	2-19	1.45-1.65	0.6-20	0.05-0.15	0.0-2.9	0.0-0.0	.32	.32			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
CosB:														
Colts Neck----------	0-8	55-90	5-40	5-17	1.50-1.60	2-20	0.09-0.13	0.0-2.9	0.0-2.0	.24	.28	4	3	86
	8-25	46-79	15-35	15-34	1.50-1.60	0.6-6	0.07-0.14	0.0-2.9	0.0-0.2	.28	.28			
	25-41	46-79	15-35	20-34	1.45-1.55	0.6-6	0.10-0.18	0.0-2.9	0.0-0.2	.28	.32			
	41-46	43-85	20-42	10-18	1.50-1.65	2-20	0.03-0.18	0.0-2.9	0.0-0.2	.17	.20			
	46-65	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.17	.20			
	65-70	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.20	.20			
	70-74	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.17	.20			
	74-80	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.20	.20			
CosC:														
Colts Neck----------	0-8	55-90	5-40	5-17	1.50-1.60	2-20	0.09-0.13	0.0-2.9	0.0-2.0	.24	.28	4	3	86
	8-25	46-79	15-35	15-34	1.50-1.60	0.6-6	0.07-0.14	0.0-2.9	0.0-0.2	.28	.28			
	25-41	46-79	15-35	20-34	1.45-1.55	0.6-6	0.10-0.18	0.0-2.9	0.0-0.2	.28	.32			
	41-46	43-85	20-42	10-18	1.50-1.65	2-20	0.03-0.18	0.0-2.9	0.0-0.2	.17	.20			
	46-65	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.17	.20			
	65-70	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.20	.20			
	70-74	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.17	.20			
	74-80	70-90	5-25	3-20	1.55-1.70	2-20	0.03-0.10	0.0-2.9	0.0-0.0	.20	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
DocB:														
Downer--------------	0-10	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.5-2.0	.20	.20	5	2	134
	10-16	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.20	.20			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
DocC:														
Downer--------------	0-10	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.5-2.0	.20	.20	5	2	134
	10-16	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.20	.20			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
DoeA:														
Downer--------------	0-10	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-16	55-80	5-42	6-15	1.55-1.65	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
DoeB:														
Downer--------------	0-10	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-16	55-80	5-42	6-15	1.55-1.65	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
DouB:														
Downer--------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-16	55-80	5-42	6-15	1.55-1.65	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	8	0
EveB:														
Evesboro------------	0-4	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-1.5	.10	.10	5	1	220
	4-17	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	17-31	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	31-80	43-96	2-45	2-15	1.50-1.70	2-20	0.04-0.09	0.0-2.9	0.0-0.0	.17	.17			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
EveC:														
Evesboro------------	0-4	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-1.5	.10	.10	5	1	220
	4-17	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	17-31	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	31-80	43-96	2-45	2-15	1.50-1.70	2-20	0.04-0.09	0.0-2.9	0.0-0.0	.17	.17			
EveE:														
Evesboro------------	0-4	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-1.5	.10	.10	5	1	220
	4-17	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	17-31	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	31-80	43-96	2-45	2-15	1.50-1.70	2-20	0.04-0.09	0.0-2.9	0.0-0.0	.17	.17			
EvuB:														
Evesboro------------	0-4	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-1.5	.10	.10	5	1	220
	4-17	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	17-31	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.15	.15			
	31-80	43-96	2-45	2-15	1.50-1.70	2-20	0.04-0.09	0.0-2.9	0.0-0.0	.17	.17			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
FamA:														
Fallsington---------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-5	55-80	5-42	6-15	1.50-1.60	0.6-6	0.15-0.20	0.0-2.9	1.0-4.0	.24	.24			
	5-8	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	8-14	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	14-31	23-80	5-50	18-35	1.45-1.55	0.2-2	0.06-0.20	0.0-2.9	0.0-0.5	.15	.20			
	31-62	43-95	4-40	3-18	1.50-1.70	2-20	0.04-0.13	0.0-2.9	0.0-0.5	.10	.10			
	62-80	43-95	4-40	2-18	1.50-1.70	2-20	0.03-0.11	0.0-2.9	0.0-0.5	.05	.10			
FapA:														
Fallsington---------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-5	23-52	28-50	7-27	1.45-1.55	0.6-2	0.15-0.20	0.0-2.9	1.0-4.0	.28	.28			
	5-8	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	8-14	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	14-31	23-80	5-50	18-35	1.45-1.55	0.2-2	0.06-0.20	0.0-2.9	0.0-0.5	.15	.20			
	31-62	43-95	4-40	3-18	1.50-1.70	2-20	0.04-0.13	0.0-2.9	0.0-0.5	.10	.10			
	62-80	43-95	4-40	2-18	1.50-1.70	2-20	0.03-0.11	0.0-2.9	0.0-0.5	.05	.10			
FauB:														
Fallsington---------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-5	55-80	5-42	6-15	1.50-1.60	0.6-6	0.15-0.20	0.0-2.9	1.0-4.0	.24	.24			
	5-8	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	8-14	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	14-31	23-80	5-50	18-35	1.45-1.55	0.2-2	0.06-0.20	0.0-2.9	0.0-0.5	.15	.20			
	31-62	43-95	4-40	3-18	1.50-1.70	2-20	0.04-0.13	0.0-2.9	0.0-0.5	.10	.10			
	62-80	43-95	4-40	2-18	1.50-1.70	2-20	0.03-0.11	0.0-2.9	0.0-0.5	.05	.10			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
FauB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
FmhAt:														
Fluvaquents, loamy, frequently flooded-	0-5	23-52	28-50	7-27	1.20-1.40	0.6-2	0.16-0.20	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	5-12	20-50	50-80	12-27	1.30-1.50	0.6-2	0.16-0.20	0.0-2.9	0.0-0.5	.43	.43			
	12-18	45-80	5-25	20-35	1.20-1.50	0.6-2	0.12-0.18	3.0-5.9	0.0-0.5	.32	.37			
	18-24	45-80	5-25	20-35	1.20-1.50	0.6-2	0.12-0.18	3.0-5.9	0.0-0.5	.32	.37			
	24-60	43-85	10-45	5-15	1.20-1.70	2-6	0.04-0.08	0.0-2.9	0.0-0.5	.10	.17			
FrfB:														
Freehold------------	0-10	71-89	4-29	3-14	1.55-1.65	6-20	0.07-0.12	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrfC:														
Freehold------------	0-10	71-89	4-29	3-14	1.55-1.65	6-20	0.07-0.12	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkA:														
Freehold------------	0-10	55-80	5-42	6-15	1.50-1.60	2-6	0.15-0.20	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkB:														
Freehold------------	0-10	55-80	5-42	6-15	1.50-1.60	2-6	0.15-0.20	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkC:														
Freehold------------	0-10	55-80	5-42	6-15	1.50-1.60	2-6	0.15-0.20	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
FrkD:														
Freehold------------	0-7	25-80	10-50	10-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28	5	3	86
	7-11	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	11-18	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	18-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkD2:														
Freehold, eroded----	0-7	25-80	10-50	10-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28	5	3	86
	7-11	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	11-18	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	18-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkE:														
Freehold------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrkF:														
Freehold------------	0-8	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	8-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
FrrB:														
Freehold------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
FrrC:														
Freehold------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
HbmB:														
Hammonton-----------	0-8	71-89	4-29	3-14	1.55-1.65	6-20	0.10-0.14	0.0-2.9	1.0-3.0	.20	.20	5	2	134
	8-18	71-89	4-29	3-14	1.55-1.65	2-20	0.10-0.14	0.0-2.9	0.2-0.8	.20	.20			
	18-36	55-80	5-42	6-15	1.50-1.60	2-6	0.10-0.14	0.0-2.9	0.2-0.8	.28	.28			
	36-80	70-96	2-20	2-14	1.55-1.70	6-20	0.08-0.13	0.0-2.9	0.0-0.0	.10	.10			
HbrB:														
Hammonton-----------	0-8	71-89	4-29	3-14	1.55-1.65	6-20	0.10-0.14	0.0-2.9	1.0-3.0	.20	.20	5	2	134
	8-18	71-89	4-29	3-14	1.55-1.65	2-20	0.10-0.14	0.0-2.9	0.2-0.8	.20	.20			
	18-36	55-80	5-42	6-15	1.50-1.60	2-6	0.10-0.14	0.0-2.9	0.2-0.8	.28	.28			
	36-80	70-96	2-20	2-14	1.55-1.70	6-20	0.08-0.13	0.0-2.9	0.0-0.0	.10	.10			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	8	0
JdrA:														
Jade Run------------	0-11	50-84	15-49	3-15	1.50-1.60	2-6	0.16-0.18	0.0-2.9	2.0-5.0	.32	.32	5	3	86
	11-19	20-84	15-80	5-18	1.45-1.55	0.6-6	0.15-0.21	0.0-2.9	0.5-1.0	.43	.43			
	19-23	20-84	15-80	5-18	1.45-1.55	0.6-6	0.15-0.21	0.0-2.9	0.5-1.0	.43	.43			
	23-28	50-84	15-49	5-18	1.45-1.60	0.6-6	0.11-0.17	0.0-2.9	0.0-0.5	.43	.43			
	28-35	50-84	15-49	5-18	1.45-1.60	0.6-6	0.11-0.17	0.0-2.9	0.0-0.5	.43	.43			
	35-52	50-89	5-49	3-18	1.45-1.65	0.6-20	0.09-0.17	0.0-2.9	0.0-0.2	.43	.43			
	52-65	75-95	2-25	2-14	1.55-1.70	6-20	0.04-0.08	0.0-2.9	0.0-0.2	.10	.10			
	65-80	75-95	2-25	2-14	1.60-1.80	6-20	0.03-0.06	0.0-2.9	0.0-0.2	.10	.10			
JduA:														
Jade Run------------	0-11	50-84	15-49	3-15	1.50-1.60	2-6	0.16-0.18	0.0-2.9	2.0-5.0	.32	.32	5	3	86
	11-19	20-84	15-80	5-18	1.45-1.55	0.6-6	0.15-0.21	0.0-2.9	0.5-1.0	.43	.43			
	19-23	20-84	15-80	5-18	1.45-1.55	0.6-6	0.15-0.21	0.0-2.9	0.5-1.0	.43	.43			
	23-28	50-84	15-49	5-18	1.45-1.60	0.6-6	0.11-0.17	0.0-2.9	0.0-0.5	.43	.43			
	28-35	50-84	15-49	5-18	1.45-1.60	0.6-6	0.11-0.17	0.0-2.9	0.0-0.5	.43	.43			
	35-52	50-89	5-49	3-18	1.45-1.65	0.6-20	0.09-0.17	0.0-2.9	0.0-0.2	.43	.43			
	52-65	75-95	2-25	2-14	1.55-1.70	6-20	0.04-0.08	0.0-2.9	0.0-0.2	.10	.10			
	65-80	75-95	2-25	2-14	1.60-1.80	6-20	0.03-0.06	0.0-2.9	0.0-0.2	.10	.10			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
KemB:														
Keyport-------------	0-12	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.16	0.0-2.9	1.0-3.0	.28	.28	3	3	86
	12-18	20-45	20-39	35-55	1.25-1.50	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	18-24	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	24-32	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	32-41	10-45	20-70	30-55	1.25-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.24	.24			
	41-55	10-45	20-73	27-40	1.40-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	55-80	10-85	5-73	3-40	1.45-1.65	0.2-20	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
KemC2:														
Keyport, eroded-----	0-9	25-80	10-50	8-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.5	.28	.28	3	3	86
	9-15	20-45	20-39	35-55	1.25-1.50	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	15-21	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	21-32	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	32-41	10-45	20-70	30-55	1.25-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.24	.24			
	41-55	10-45	20-73	27-40	1.40-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	55-80	10-85	5-73	3-40	1.45-1.65	0.2-20	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
KeoA:														
Keyport-------------	0-12	23-52	28-50	7-27	1.45-1.55	0.6-2	0.16-0.22	0.0-2.9	1.0-3.0	.37	.37	3	5	56
	12-18	20-45	20-39	35-55	1.25-1.50	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	18-24	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	24-32	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	32-41	10-45	20-70	30-55	1.25-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.24	.24			
	41-55	10-45	20-73	27-40	1.40-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	55-80	10-85	5-73	3-40	1.45-1.65	0.2-20	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
KeuB:														
Keyport-------------	0-12	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.16	0.0-2.9	1.0-3.0	.28	.28	3	3	86
	12-18	20-45	20-39	35-55	1.25-1.50	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	18-24	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	24-32	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.14-0.20	3.0-5.9	0.0-0.5	.20	.20			
	32-41	10-45	20-70	30-55	1.25-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.24	.24			
	41-55	10-45	20-73	27-40	1.40-1.55	0.2-0.6	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	55-80	10-85	5-73	3-40	1.45-1.65	0.2-20	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
KreA:														
Kresson-------------	0-6	50-84	15-49	3-15	1.50-1.60	0.6-6	0.18-0.22	0.0-2.0	1.0-2.0	.32	.32	3	3	86
	6-18	20-80	10-38	20-55	1.25-1.45	0.2-0.6	0.16-0.20	3.0-5.9	0.1-0.5	.20	.20			
	18-33	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.16-0.20	4.0-5.9	0.0-0.2	.20	.20			
	33-41	20-45	10-50	27-50	1.25-1.50	0.2-0.6	0.16-0.20	3.5-6.0	0.0-0.2	.20	.20			
	41-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.11-0.16	0.0-2.9	0.0-0.2	.20	.20			
LakB:														
Lakehurst-----------	0-2	0-98	0-7	0-7	0.13-0.23	6-20	0.35-0.45	---	70-100	.05	.05	5	7	38
	2-4	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	1.0-3.0	.10	.10			
	4-18	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.10	.10			
	18-32	70-96	2-25	2-14	1.55-1.65	6-20	0.04-0.10	0.0-2.9	0.5-1.0	.10	.10			
	32-45	70-96	2-25	3-14	1.55-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	45-54	45-96	2-35	3-16	1.50-1.70	2-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	54-80	45-96	2-35	3-16	1.50-1.70	2-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
LasB:														
Lakewood------------	0-3	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	1.0-2.0	.10	.10	5	1	220
	3-11	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.10	.10			
	11-13	70-90	5-25	3-14	1.55-1.65	6-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15			
	13-30	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	30-46	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	46-80	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
LatvB:														
Lakewood------------	0-3	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	1.0-2.0	.10	.10	5	1	220
	3-11	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.10	.10			
	11-13	70-90	5-25	3-14	1.55-1.65	6-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15			
	13-30	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	30-46	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	46-80	70-96	2-25	2-14	1.55-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
Quakerbridge--------	0-2	0-98	0-7	0-7	0.13-0.23	6-20	0.35-0.45	---	70-100	.05	.05	5	7	38
	2-3	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	1.0-3.0	.10	.10			
	3-20	85-96	2-12	2-9	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.0	.10	.10			
	20-24	70-96	2-25	3-14	1.55-1.65	6-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15			
	24-42	70-96	2-25	3-14	1.55-1.70	6-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	42-54	45-96	2-35	3-16	1.50-1.70	2-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
	54-80	45-96	2-35	3-16	1.50-1.70	2-20	0.04-0.10	0.0-2.9	0.0-0.1	.10	.10			
LenA:														
Lenni---------------	0-5	23-52	28-50	7-27	1.45-1.55	0.6-2	0.18-0.24	0.0-2.9	1.0-4.0	.37	.37	3	5	56
	5-10	20-52	15-53	25-40	1.40-1.55	0.2-0.6	0.18-0.24	3.0-5.9	0.0-0.5	.24	.24			
	10-18	10-45	20-60	40-55	1.25-1.50	0.06-0.2	0.12-0.19	3.0-5.9	0.0-0.5	.20	.20			
	18-33	10-45	20-73	27-40	1.40-1.55	0.2-0.6	0.12-0.19	3.0-5.9	0.0-0.5	.28	.28			
	33-45	55-80	5-42	6-15	1.50-1.60	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.24	.24			
	45-80	43-89	5-55	5-12	1.50-1.65	2-20	0.10-0.15	0.0-2.9	0.0-0.5	.24	.24			
MakAt:														
Manahawkin,														
frequently flooded-	0-13	0-96	0-25	0-14	0.15-0.40	6-20	0.30-0.40	---	30-80	.05	.05	2	2	134
	13-26	0-96	0-25	0-14	0.15-0.40	6-20	0.30-0.40	---	30-80	.02	.02			
	26-47	0-96	0-25	0-14	0.15-0.40	6-20	0.30-0.40	---	30-80	.02	.02			
	47-80	70-96	2-25	2-14	1.10-1.70	2-20	0.04-0.08	0.0-2.9	0.5-1.0	.10	.10			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
MamnAv:														
Mannington, very frequently flooded-	0-14	20-50	50-80	12-18	0.40-0.80	0.2-0.6	0.16-0.22	0.0-2.9	10-19	.32	.32	5	8	0
	14-32	8-19	40-80	20-34	0.40-1.55	0.2-2	0.16-0.25	0.0-2.9	3.0-19	.37	.37			
	32-42	0-50	0-80	0-18	0.13-0.23	0.6-2	0.35-0.45	---	70-100	.05	.05			
	42-52	0-50	0-80	0-18	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05			
	52-62	20-50	50-80	12-18	0.40-0.80	0.2-0.6	0.16-0.22	0.0-2.9	10-19	.32	.32			
	62-90	15-85	20-80	14-34	1.45-1.60	0.2-6	0.11-0.18	0.0-2.9	2.0-8.0	.37	.37			
Nanticoke, very frequently flooded-	0-5	20-49	50-80	8-15	1.45-1.55	0.2-0.6	0.15-0.25	0.0-2.9	10-19	.32	.32	5	8	0
	5-50	20-49	50-80	18-25	1.45-1.55	0.2-0.6	0.10-0.20	0.0-2.9	0.5-5.0	.37	.37			
	50-80	10-49	40-80	12-39	1.45-1.55	0.2-0.6	0.10-0.20	0.0-2.9	0.5-5.0	.37	.37			
MamuAv:														
Mannington, very frequently flooded-	0-14	20-50	50-80	12-18	0.40-0.80	0.2-0.6	0.16-0.22	0.0-2.9	10-19	.32	.32	5	8	0
	14-32	8-19	40-80	20-34	0.40-1.55	0.2-2	0.16-0.25	0.0-2.9	3.0-19	.37	.37			
	32-42	0-50	0-80	0-18	0.13-0.23	0.6-2	0.35-0.45	---	70-100	.05	.05			
	42-52	0-50	0-80	0-18	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05			
	52-62	20-50	50-80	12-18	0.40-0.80	0.2-0.6	0.16-0.22	0.0-2.9	10-19	.32	.32			
	62-90	15-85	20-80	14-34	1.45-1.60	0.2-6	0.11-0.18	0.0-2.9	2.0-8.0	.37	.37			
Nanticoke, very frequently flooded-	0-5	20-49	50-80	8-15	1.45-1.55	0.2-0.6	0.15-0.25	0.0-2.9	10-19	.32	.32	5	8	0
	5-50	20-49	50-80	18-25	1.45-1.55	0.2-0.6	0.10-0.20	0.0-2.9	0.5-5.0	.37	.37			
	50-80	10-49	40-80	12-39	1.45-1.55	0.2-0.6	0.10-0.20	0.0-2.9	0.5-5.0	.37	.37			
Udorthents----------	0-60	10-50	50-80	12-27	1.20-1.50	0.2-0.6	0.16-0.24	0.0-2.9	3.0-5.0	.37	.37	5	8	0
MaoB:														
Marlton-------------	0-10	55-80	5-42	5-12	1.50-1.60	2-6	0.11-0.13	0.0-2.0	1.0-3.0	.37	.37	3	3	86
	10-20	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	20-28	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	28-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			
MaoC:														
Marlton-------------	0-10	55-80	5-42	5-12	1.50-1.60	2-6	0.11-0.13	0.0-2.0	1.0-3.0	.37	.37	3	3	86
	10-20	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	20-28	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	28-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
MaoC2:														
Marlton, eroded-----	0-7	25-80	10-50	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.37	.37	2	3	86
	7-17	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	17-25	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	25-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			
MaoD:														
Marlton-------------	0-10	55-80	5-42	5-12	1.50-1.60	2-6	0.11-0.13	0.0-2.0	1.0-3.0	.37	.37	3	3	86
	10-20	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	20-28	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	28-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			
MaoD2:														
Marlton, eroded-----	0-7	25-80	10-50	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.37	.37	3	3	86
	7-17	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	17-25	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	25-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			
MauB:														
Marlton-------------	0-10	25-80	10-50	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.37	.37	3	3	86
	10-20	20-45	10-50	27-50	1.25-1.45	0.2-0.6	0.14-0.21	3.0-5.9	0.0-0.2	.20	.20			
	20-28	20-65	5-38	35-55	1.25-1.45	0.06-0.2	0.14-0.17	4.0-5.9	0.0-0.2	.20	.20			
	28-47	20-75	5-39	25-50	1.25-1.55	0.06-0.6	0.14-0.16	3.0-5.9	0.0-0.2	.20	.20			
	47-80	43-80	5-49	8-34	1.45-1.60	0.2-6	0.08-0.16	0.0-2.9	0.0-0.0	.20	.20			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
MumA:														
Mullica-------------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.20	0.0-2.9	2.0-4.0	.28	.28			
	9-14	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	14-28	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	28-31	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	31-40	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	40-80	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.08	0.0-2.9	0.0-0.0	.05	.10			
OTKA:														
Othello-------------	0-1	0-50	0-80	0-18	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	1-13	20-50	50-80	8-18	1.45-1.55	0.2-2	0.16-0.24	0.0-2.9	1.0-2.0	.37	.37			
	13-32	20-50	50-80	15-27	1.45-1.55	0.2-2	0.12-0.24	0.0-2.9	0.0-0.5	.43	.43			
	32-40	5-19	45-80	27-39	1.45-1.55	0.2-2	0.12-0.24	3.0-5.9	0.0-0.5	.37	.37			
	40-60	71-89	4-29	3-14	1.55-1.65	2-20	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
	60-80	85-96	2-12	2-9	1.60-1.70	2-20	0.10-0.16	0.0-2.9	0.0-0.5	.10	.10			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
OTKA:														
Fallsington---------	0-2	0-52	0-50	0-27	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-5	23-52	28-50	7-27	1.45-1.55	0.6-2	0.15-0.20	0.0-2.9	1.0-4.0	.28	.28			
	5-8	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	8-14	43-85	5-55	18-20	1.50-1.60	0.6-6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	14-31	23-80	5-50	18-35	1.45-1.55	0.2-2	0.06-0.20	0.0-2.9	0.0-0.5	.15	.20			
	31-62	43-95	4-40	3-18	1.50-1.70	2-20	0.04-0.13	0.0-2.9	0.0-0.5	.10	.10			
	62-80	43-95	4-40	2-18	1.50-1.70	2-20	0.03-0.11	0.0-2.9	0.0-0.5	.05	.10			
PEEAR:														
Pedricktown, rarely flooded------------	0-2	0-50	0-80	0-18	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	4	5	56
	2-9	20-50	50-80	8-18	1.45-1.55	0.2-2	0.17-0.28	0.0-2.9	3.0-8.0	.32	.32			
	9-22	43-85	5-55	18-20	1.50-1.60	2-6	0.08-0.16	0.0-2.9	1.0-2.0	.28	.28			
	22-36	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.17			
	36-40	20-80	10-75	7-35	1.40-1.60	0.2-2	0.18-0.22	0.0-2.9	0.0-0.5	.20	.20			
	40-49	43-85	5-55	18-20	1.50-1.60	2-6	0.08-0.16	0.0-2.9	1.0-2.0	.28	.28			
	49-56	71-89	4-29	3-14	1.55-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.17			
	56-72	71-96	2-29	2-14	1.55-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.10			
Askecksy, rarely flooded------------	0-9	71-89	4-29	3-14	1.55-1.65	6-20	0.03-0.10	0.0-2.9	1.0-5.0	.20	.20	5	2	134
	9-11	85-96	2-12	2-9	1.60-1.70	6-20	0.03-0.10	0.0-2.9	0.5-1.0	.10	.10			
	11-28	85-96	2-12	2-9	1.55-1.70	6-20	0.03-0.10	0.0-2.9	0.5-1.0	.10	.10			
	28-31	85-96	2-12	2-9	1.60-1.80	6-20	0.02-0.05	0.0-2.9	0.5-1.0	.10	.10			
	31-80	85-96	2-12	2-9	1.60-1.80	6-20	0.02-0.05	0.0-2.9	0.5-1.0	.10	.10			
Mullica, rarely flooded------------	0-2	0-80	0-42	0-15	0.13-0.23	2-6	0.35-0.65	---	70-100	.05	.05	5	5	56
	2-9	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.20	0.0-2.9	2.0-4.0	.28	.28			
	9-14	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	14-28	55-80	5-42	6-15	1.50-1.60	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.28	.28			
	28-31	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	31-40	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.10	0.0-2.9	0.1-0.5	.10	.10			
	40-80	70-96	2-25	2-14	1.55-1.70	6-20	0.02-0.08	0.0-2.9	0.0-0.0	.17	.10			
PHG:														
Pits, sand and gravel-------------	---	---	---	---	---	---	---	---	---	---	---	5	8	0
SabB:														
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
SabC:														
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SabD:														
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SabF:														
Sassafras-----------	0-12	71-89	4-29	3-11	1.55-1.65	2-20	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	5	2	134
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SacA:														
Sassafras-----------	0-12	55-80	5-42	8-16	1.50-1.60	0.6-6	0.13-0.15	0.0-2.9	0.8-2.5	.28	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SacB:														
Sassafras-----------	0-12	55-80	5-42	8-16	1.50-1.60	0.6-6	0.13-0.15	0.0-2.9	0.8-2.5	.28	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SacC:														
Sassafras-----------	0-12	55-80	5-42	8-16	1.50-1.60	0.6-6	0.13-0.15	0.0-2.9	0.8-2.5	.28	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
SacD:														
Sassafras-----------	0-12	55-80	5-42	8-16	1.50-1.60	0.6-6	0.13-0.15	0.0-2.9	0.8-2.5	.28	.28	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
SapB:														
Sassafras-----------	0-12	55-89	4-42	8-16	1.55-1.65	2-20	0.07-0.20	0.0-2.9	0.8-2.5	.20	.20	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
ThfB:														
Tinton--------------	0-12	85-96	2-12	2-7	1.60-1.70	6-20	0.03-0.08	0.0-2.9	0.5-1.0	.15	.15	5	1	220
	12-26	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.5-0.8	.17	.17			
	26-38	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	38-50	70-96	2-25	3-14	1.55-1.70	2-20	0.06-0.12	0.0-2.9	0.0-0.0	.15	.15			
	50-80	43-95	4-40	2-18	1.55-1.70	0.6-20	0.06-0.12	0.0-2.9	0.0-0.0	.17	.20			
UdauB:														
Udorthents----------	0-12	35-47	35-50	10-18	1.30-1.52	0.06-0.2	0.00-0.00	0.0-2.9	2.0-4.0	.32	.32	3	5	56
	12-72	35-98	2-50	0-18	0.67-1.58	0.2-20	0.08-0.19	0.0-2.9	0.5-1.0	.28	.32			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	8	0
UddB:														
Udorthents, dredged materials----------	0-12	35-47	35-50	10-18	1.30-1.52	0.06-0.2	0.00-0.00	0.0-0.2	2.0-4.0	.32	.32	5	5	56
	12-72	43-98	2-50	0-18	0.67-1.58	0.2-20	0.08-0.19	0.0-0.1	0.5-1.0	.28	.32			
UddcB:														
Udorthents, dredged coarse materials---	0-12	35-47	35-50	10-18	1.30-1.52	0.06-0.2	0.00-0.00	0.0-0.2	2.0-4.0	.32	.32	5	5	56
	12-72	43-98	1-50	0-18	0.67-1.58	0.2-20	0.08-0.19	0.0-0.1	0.5-1.0	.28	.32			
UddfB:														
Udorthents, dredged fine materials-----	0-12	23-52	28-50	7-27	1.30-1.50	0.6-2	0.14-0.20	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	12-72	1-80	1-40	25-70	1.10-1.30	0.06-0.2	0.17-0.21	3.0-5.9	0.0-0.0	.43	.43			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
UddrB:														
Udorthents, dredged materials----------	0-12	35-47	35-50	10-18	1.30-1.52	0.06-0.2	0.00-0.00	0.0-0.2	2.0-4.0	.32	.32	5	5	56
	12-72	43-98	2-50	0-18	0.67-1.58	0.2-20	0.08-0.19	0.0-0.1	0.5-1.0	.28	.32			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	8	0
UdrB:														
Udorthents, refuse substratum---------	0-60	10-50	50-80	12-27	1.20-1.50	0.6-2	0.16-0.24	0.0-2.9	3.0-5.0	.37	.37	5	5	56
UR:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	8	0
USAURB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Aura----------------	0-8	55-75	15-40	8-16	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.8-2.5	.24	.28	3	3	86
	8-13	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	13-22	55-75	15-40	8-17	1.50-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.2	.24	.28			
	22-28	55-75	15-40	8-17	1.60-1.70	0.2-0.6	0.05-0.13	0.0-2.9	0.0-0.2	.20	.28			
	28-44	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	44-59	46-79	10-35	20-34	1.55-1.65	0.2-0.6	0.07-0.16	0.0-2.9	0.0-0.2	.20	.32			
	59-80	75-86	2-40	2-17	1.55-1.80	2-20	0.02-0.13	0.0-2.9	0.0-0.0	.15	.20			
USDOWB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Downer--------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-16	55-80	5-42	6-15	1.55-1.65	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	16-36	55-80	5-42	6-15	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.0-0.2	.28	.28			
	36-48	55-89	4-42	3-15	1.55-1.70	2-20	0.03-0.20	0.0-2.9	0.0-0.0	.15	.20			
	48-80	55-96	1-42	2-15	1.50-1.70	2-20	0.04-0.14	0.0-2.9	0.0-0.0	.15	.20			
USFREB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Freehold------------	0-10	55-89	4-42	3-15	1.55-1.65	2-20	0.07-0.20	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	10-14	43-85	5-30	18-20	1.50-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.24	.24			
	14-21	45-80	10-40	18-35	1.45-1.55	0.2-2	0.12-0.18	0.0-2.9	0.0-0.2	.24	.24			
	21-35	25-80	10-30	18-27	1.45-1.60	0.2-6	0.12-0.18	0.0-2.9	0.0-0.2	.28	.28			
	35-80	43-85	5-20	3-16	1.50-1.65	2-20	0.07-0.15	0.0-2.9	0.0-0.0	.20	.20			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
USSASB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Sassafras-----------	0-12	55-89	4-42	8-16	1.55-1.65	2-20	0.07-0.20	0.0-2.9	0.8-2.5	.20	.20	5	3	86
	12-18	43-85	5-55	15-22	1.50-1.60	0.6-6	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
	18-28	46-79	10-35	20-34	1.45-1.55	0.2-2	0.11-0.22	0.0-2.9	0.1-0.5	.32	.32			
	28-40	43-85	5-50	3-16	1.50-1.65	2-20	0.07-0.13	0.0-2.9	0.1-0.5	.20	.20			
	40-58	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
	58-80	43-95	4-40	2-18	1.50-1.70	2-20	0.04-0.12	0.0-2.9	0.1-0.5	.15	.15			
USWESB:														
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
WeeB:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
WeeC:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
WeeD:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
WeeD2:														
Westphalia, eroded--	0-4	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	4-13	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	13-28	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	28-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
WeeF:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
WehB:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
WehC:														
Westphalia----------	0-6	50-84	15-49	3-15	1.45-1.65	0.2-6	0.09-0.24	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	6-15	50-84	15-49	3-15	1.45-1.60	0.6-2	0.10-0.24	0.0-2.9	0.0-0.2	.37	.37			
	15-30	71-89	4-29	3-14	1.55-1.65	0.6-20	0.08-0.16	0.0-2.9	0.0-0.1	.28	.28			
	30-48	85-96	2-12	2-9	1.60-1.70	6-20	0.05-0.12	0.0-2.9	0.0-0.0	.20	.20			
	48-80	85-96	1-12	2-9	1.55-1.65	2-20	0.05-0.12	0.0-2.9	0.0-0.0	.24	.24			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---
WoeA:														
Woodstown-----------	0-8	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.14	0.0-2.9	1.0-2.0	.28	.28	5	3	86
	8-26	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.1-0.5	.24	.24			
	26-30	46-79	10-35	20-34	1.45-1.55	0.2-2	0.06-0.16	3.0-5.9	0.0-0.2	.20	.20			
	30-36	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.0-0.2	.24	.24			
	36-80	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.2	.15	.15			
WoeB:														
Woodstown-----------	0-8	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.14	0.0-2.9	1.0-2.0	.28	.28	5	3	86
	8-26	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.1-0.5	.24	.24			
	26-30	46-79	10-35	20-34	1.45-1.55	0.2-2	0.06-0.16	3.0-5.9	0.0-0.2	.20	.20			
	30-36	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.0-0.2	.24	.24			
	36-80	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.2	.15	.15			
WokA:														
Woodstown-----------	0-8	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.14	0.0-2.9	1.0-2.0	.28	.28	5	3	86
	8-26	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.1-0.5	.24	.24			
	26-30	46-79	10-35	20-34	1.45-1.55	0.2-2	0.06-0.16	0.0-2.9	0.0-0.2	.20	.20			
	30-36	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.0-0.2	.24	.24			
	36-80	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.2	.15	.15			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
WokA:														
Glassboro-----------	0-11	55-80	5-42	5-12	1.50-1.60	2-6	0.12-0.14	0.0-2.9	1.0-2.0	.28	.28	5	3	86
	11-16	23-80	5-48	5-18	1.45-1.60	0.6-6	0.11-0.18	0.0-2.9	0.1-0.5	.24	.24			
	16-21	55-80	5-42	5-12	1.50-1.60	0.6-6	0.08-0.13	0.0-2.9	0.0-0.2	.24	.24			
	21-26	55-80	5-42	5-12	1.50-1.60	0.6-6	0.08-0.13	0.0-2.9	0.0-0.2	.24	.24			
	26-40	71-89	4-29	3-14	1.55-1.70	2-20	0.06-0.08	0.0-2.9	0.0-0.2	.10	.15			
	40-56	85-96	2-12	2-9	1.60-1.80	6-20	0.04-0.06	0.0-2.9	0.0-0.2	.05	.10			
	56-80	71-96	2-29	2-14	1.55-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.2	.05	.10			
WooB:														
Woodstown-----------	0-8	55-80	5-42	5-12	1.50-1.60	0.6-6	0.12-0.14	0.0-2.9	1.0-2.0	.28	.28	5	3	86
	8-26	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.1-0.5	.24	.24			
	26-30	46-79	10-35	20-34	1.45-1.55	0.2-2	0.06-0.16	3.0-5.9	0.0-0.2	.20	.20			
	30-36	55-80	5-42	5-20	1.50-1.60	0.6-6	0.11-0.13	0.0-2.9	0.0-0.2	.24	.24			
	36-80	70-96	2-25	2-14	1.55-1.70	2-20	0.03-0.08	0.0-2.9	0.0-0.2	.15	.15			
Urban land----------	---	---	---	---	---	---	---	---	---	---	---	--	---	---

Table 20.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
AtsA:				
Atsion	0-2	9.2-14	6.9-10	3.6-4.3
	2-4	1.5-6.0	1.1-4.5	3.6-5.0
	4-26	0.1-1.2	0.1-0.9	3.6-5.0
	26-34	0.3-4.8	0.2-3.6	3.6-5.0
	34-46	0.3-4.8	0.2-3.6	3.6-5.0
	46-51	0.3-1.1	0.2-0.8	3.6-5.0
	51-80	0.4-1.7	0.3-1.3	4.5-5.0
AtsAr:				
Atsion, rarely flooded	0-2	9.2-14	6.9-10	3.6-4.3
	2-4	1.5-6.0	1.1-4.5	3.6-5.0
	4-26	0.1-1.2	0.1-0.9	3.6-5.0
	26-34	0.3-4.8	0.2-3.6	3.6-5.0
	34-46	0.3-4.8	0.2-3.6	3.6-5.0
	46-51	0.3-1.1	0.2-0.8	3.6-5.0
	51-80	0.4-1.7	0.3-1.3	4.5-5.0
AucB:				
Aura	0-7	1.1-5.2	0.8-3.9	3.6-6.5
	7-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
AugA:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
AugB:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
AugC:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
AupB:				
Aura	0-8	2.6-5.6	2.0-4.2	3.6-6.5
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
AvsB:				
Aura	0-7	1.1-5.2	0.8-3.9	3.6-6.5
	7-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Sassafras	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
AvsC:				
Aura	0-7	1.1-5.2	0.8-3.9	3.6-6.5
	7-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Sassafras	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
AvtB:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Sassafras	0-12	2.0-4.8	1.3-3.2	3.6-5.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
AvtC:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Sassafras	0-12	2.0-4.8	1.3-3.2	3.6-5.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
AvtC2:				
Aura, eroded	0-6	2.0-5.3	1.3-3.2	3.6-5.0
	6-11	2.0-5.3	1.5-4.0	3.6-5.0
	11-20	2.0-5.3	1.5-4.0	3.6-5.0
	20-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Sassafras, eroded	0-9	2.0-9.9	1.3-6.6	3.6-5.0
	9-15	6.2-7.1	4.7-5.3	3.6-6.5
	15-25	6.9-12	5.2-9.0	3.6-6.5
	25-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
AvuB:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Urban land	---	---	---	---
AvuC:				
Aura	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
Urban land	---	---	---	---
BerAr:				
Berryland, rarely flooded	0-11	1.5-6.0	1.1-4.5	3.6-5.5
	11-19	0.3-4.8	0.2-3.6	3.6-5.5
	19-32	0.3-1.7	0.2-1.3	3.6-5.5
	32-40	0.3-4.8	0.2-3.6	3.6-5.5
	40-44	0.3-1.7	0.2-1.3	3.6-5.5
	44-80	0.3-1.9	0.2-1.4	3.6-5.5
BEXAS:				
Berryland, occasionally flooded	0-11	1.5-6.0	1.1-4.5	3.6-5.5
	11-19	0.3-4.8	0.2-3.6	3.6-5.5
	19-32	0.3-1.7	0.2-1.3	3.6-5.5
	32-40	0.3-4.8	0.2-3.6	3.6-5.5
	40-44	0.3-1.7	0.2-1.3	3.6-5.5
	44-80	0.1-1.9	0.1-1.4	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
BEXAS:				
Mullica, occasionally flooded-------------	0-2	9.2-14	6.9-10	3.6-4.3
	2-9	1.3-3.5	1.0-2.6	3.6-5.0
	9-14	1.3-3.6	1.0-2.7	3.6-5.0
	14-28	1.3-3.6	1.0-2.7	3.6-5.0
	28-31	0.4-3.9	0.3-2.9	3.6-5.0
	31-40	0.4-3.9	0.3-2.9	3.6-5.0
	40-80	0.5-4.3	0.4-3.2	4.5-5.0
BumA:				
Buddtown-------------	0-9	1.6-9.8	1.2-7.4	3.5-6.5
	9-12	5.2-9.6	3.9-7.2	3.5-6.5
	12-26	5.2-11	3.9-8.4	3.5-5.5
	26-34	5.2-11	3.9-8.4	3.5-5.5
	34-41	1.1-8.4	0.8-6.3	3.5-5.5
	41-54	1.1-8.4	0.8-6.3	3.5-5.5
	54-65	0.7-5.1	0.5-3.8	3.5-5.5
	65-80	0.7-5.1	0.5-3.8	3.5-5.5
Deptford-------------	0-8	1.6-9.8	1.2-7.4	3.5-6.5
	8-12	5.2-9.6	3.9-7.2	3.5-6.5
	12-22	5.2-11	3.9-8.4	3.5-5.5
	22-46	4.1-11	3.1-8.4	3.5-5.5
	46-50	1.1-11	0.8-8.4	3.5-5.5
	50-62	1.1-11	0.8-8.4	3.5-5.5
	62-80	1.1-11	0.8-8.4	3.5-5.5
BuuB:				
Buddtown-------------	0-9	1.6-9.8	1.2-7.4	3.5-6.5
	9-12	5.2-9.6	3.9-7.2	3.5-6.5
	12-26	5.2-11	3.9-8.4	3.5-5.5
	26-34	5.2-11	3.9-8.4	3.5-5.5
	34-41	1.1-8.4	0.8-6.3	3.5-5.5
	41-54	1.1-8.4	0.8-6.3	3.5-5.5
	54-65	0.7-5.1	0.5-3.8	3.5-5.5
	65-80	0.7-5.1	0.5-3.8	3.5-5.5
Urban land-----------	---	---	---	---
ChsAt:				
Chicone, frequently flooded-------------	0-5	3.6-6.5	2.7-4.9	3.5-5.5
	5-20	4.1-11	3.1-8.4	3.5-5.5
	20-28	2.1-11	1.6-8.4	3.5-5.5
	28-65	45-135	10-75	3.6-4.5
	65-80	0.5-8.4	0.4-6.3	3.5-5.5
CoeAs:				
Colemantown, occasionally flooded	0-10	2.1-12	1.6-8.9	3.6-6.5
	10-24	3.7-16	2.8-12	3.6-6.0
	24-34	2.0-13	1.5-9.8	3.6-5.5
	34-50	2.0-15	1.5-11	3.6-5.5
	50-80	0.9-14	0.7-10	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
CogB:				
Collington-----------	0-9	0.8-5.2	0.6-3.9	3.6-5.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
CogC:				
Collington-----------	0-9	0.8-5.2	0.6-3.9	3.6-5.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
CokA:				
Collington-----------	0-9	1.7-5.7	1.3-4.3	3.6-5.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
CokB:				
Collington-----------	0-9	1.7-5.7	1.3-4.3	3.6-5.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
CokC:				
Collington-----------	0-9	1.7-5.7	1.3-4.3	3.6-5.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
CopB:				
Collington-----------	0-9	1.6-8.2	1.2-6.2	4.3-6.5
	9-22	8.3-20	6.2-15	3.6-5.5
	22-30	8.3-24	6.2-18	3.6-5.5
	30-38	1.9-9.1	1.4-6.8	3.6-5.5
	38-43	0.9-12	0.7-8.9	3.6-5.5
	43-80	0.9-12	0.7-8.9	3.6-5.5
Urban land-----------	---	---	---	---
CosB:				
Colts Neck-----------	0-8	1.5-10	1.1-7.9	3.6-5.0
	8-25	7.6-18	5.7-13	4.5-6.1
	25-41	10-18	7.6-13	4.5-6.1
	41-46	5.1-9.5	3.8-7.1	4.5-6.2
	46-65	1.5-13	1.1-9.5	4.5-6.1
	65-70	1.5-13	1.1-9.5	4.5-6.1
	70-74	1.5-13	1.1-9.5	4.5-6.1
	74-80	1.5-13	1.1-9.5	4.5-6.1

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
CosC:				
Colts Neck-----------	0-8	1.5-10	1.1-7.9	3.6-5.0
	8-25	7.6-18	5.7-13	4.5-6.1
	25-41	10-18	7.6-13	4.5-6.1
	41-46	5.1-9.5	3.8-7.1	4.5-6.2
	46-65	1.5-13	1.1-9.5	4.5-6.1
	65-70	1.5-13	1.1-9.5	4.5-6.1
	70-74	1.5-13	1.1-9.5	4.5-6.1
	74-80	1.5-13	1.1-9.5	4.5-6.1
DocB:				
Downer---------------	0-10	1.1-5.2	0.8-3.9	3.6-7.0
	10-16	1.1-5.0	0.8-3.8	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
DocC:				
Downer---------------	0-10	1.1-5.2	0.8-3.9	3.6-7.0
	10-16	1.1-5.0	0.8-3.8	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
DoeA:				
Downer---------------	0-10	1.9-4.5	1.4-3.4	3.6-7.0
	10-16	2.1-5.3	1.6-4.0	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
DoeB:				
Downer---------------	0-10	1.9-4.5	1.4-3.4	3.6-7.0
	10-16	2.1-5.3	1.6-4.0	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
DouB:				
Downer---------------	0-10	1.1-5.5	0.8-4.1	4.3-6.5
	10-16	2.1-5.3	1.6-4.0	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
Urban land-----------	---	---	---	---
EveB:				
Evesboro-------------	0-4	1.1-5.5	0.8-4.1	3.6-5.0
	4-17	0.3-0.9	0.2-0.7	3.6-5.0
	17-31	0.3-1.3	0.2-1.0	3.6-5.0
	31-80	0.3-1.5	0.2-1.1	3.6-5.0
EveC:				
Evesboro-------------	0-4	1.1-5.5	0.8-4.1	3.6-5.0
	4-17	0.3-0.9	0.2-0.7	3.6-5.0
	17-31	0.3-1.3	0.2-1.0	3.6-5.0
	31-80	0.3-1.5	0.2-1.1	3.6-5.0

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
EveE:				
Evesboro-------------	0-4	1.1-5.5	0.8-4.1	3.6-5.0
	4-17	0.3-0.9	0.2-0.7	3.6-5.0
	17-31	0.3-1.3	0.2-1.0	3.6-5.0
	31-80	0.3-1.5	0.2-1.1	3.6-5.0
EvuB:				
Evesboro-------------	0-4	1.1-5.5	0.8-4.1	3.6-5.0
	4-17	0.3-0.9	0.2-0.7	3.6-5.0
	17-31	0.3-1.3	0.2-1.0	3.6-5.0
	31-80	0.3-1.5	0.2-1.1	3.6-5.0
Urban land-----------	---	---	---	---
FamA:				
Fallsington----------	0-2	9.2-14	6.9-10	3.6-4.3
	2-5	1.7-5.7	1.3-4.3	3.6-5.5
	5-8	7.6-13	0.8-11	3.6-5.5
	8-14	7.6-13	5.7-9.5	3.6-5.5
	14-31	7.6-24	5.7-18	3.6-5.5
	31-62	0.9-11	0.7-8.4	3.6-5.5
	62-80	0.7-11	0.5-8.4	3.6-5.5
FapA:				
Fallsington----------	0-2	9.2-14	6.9-10	3.6-4.3
	2-5	2.0-11	1.5-8.4	3.6-5.5
	5-8	7.6-13	0.8-11	3.6-5.5
	8-14	7.6-13	5.7-9.5	3.6-5.5
	14-31	7.6-24	5.7-18	3.6-5.5
	31-62	0.9-11	0.7-8.4	3.6-5.5
	62-80	0.7-11	0.5-8.4	3.6-5.5
FauB:				
Fallsington----------	0-2	9.2-14	6.9-10	3.6-4.3
	2-5	1.7-5.7	1.3-4.3	3.6-5.5
	5-8	7.6-13	0.8-11	3.6-5.5
	8-14	7.6-13	5.7-9.5	3.6-5.5
	14-31	7.6-24	5.7-18	3.6-5.5
	31-62	0.9-11	0.7-8.4	3.6-5.5
	62-80	0.7-11	0.5-8.4	3.6-5.5
Urban land-----------	---	---	---	---
FmhAt:				
Fluvaquents, loamy, frequently flooded--	0-5	6.0-21	4.5-16	5.1-6.5
	5-12	6.6-18	5.0-13	5.1-6.5
	12-18	10-22	7.8-16	5.1-7.3
	18-24	10-22	7.8-16	5.1-7.3
	24-60	3.1-11	2.3-7.9	5.1-7.3
FrfB:				
Freehold-------------	0-10	1.6-7.6	1.2-5.7	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
FrfC:				
Freehold-------------	0-10	1.6-7.6	1.2-5.7	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkA:				
Freehold-------------	0-10	3.3-8.2	2.5-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkB:				
Freehold-------------	0-10	3.3-8.2	2.5-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkC:				
Freehold-------------	0-10	3.3-8.2	2.5-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkD:				
Freehold-------------	0-7	4.1-18	3.1-13	4.3-5.5
	7-11	9.1-11	6.8-7.9	4.3-6.5
	11-18	8.3-24	6.2-18	4.3-5.5
	18-35	8.3-20	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkD2:				
Freehold, eroded-----	0-7	4.1-18	3.1-13	4.3-5.5
	7-11	9.1-11	6.8-7.9	4.3-6.5
	11-18	8.3-24	6.2-18	4.3-5.5
	18-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkE:				
Freehold-------------	0-10	1.6-8.2	1.2-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
FrkF:				
Freehold-------------	0-8	1.6-8.2	1.2-6.2	4.3-6.5
	8-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
FrrB:				
Freehold	0-10	1.6-8.2	1.2-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
Urban land	---	---	---	---
FrrC:				
Freehold	0-10	1.6-8.2	1.2-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.8-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
Urban land	---	---	---	---
HbmB:				
Hammonton	0-8	1.1-5.2	0.8-3.9	3.6-6.0
	8-18	0.8-10	0.6-7.6	3.6-5.5
	18-36	1.5-4.0	1.1-3.0	3.6-5.5
	36-80	0.5-4.3	0.4-3.2	3.6-5.5
HbrB:				
Hammonton	0-8	1.1-5.2	0.8-3.9	3.6-6.0
	8-18	0.8-10	0.6-7.6	3.6-5.5
	18-36	1.5-4.0	1.1-3.0	3.6-5.5
	36-80	0.5-4.3	0.4-3.2	3.6-5.5
Urban land	---	---	---	---
JdrA:				
Jade Run	0-11	1.7-8.3	1.3-6.2	3.6-7.0
	11-19	2.7-9.7	2.0-7.3	3.6-7.0
	19-23	2.7-9.7	2.0-7.3	3.6-7.0
	23-28	1.7-11	1.3-8.4	3.6-5.5
	28-35	1.7-11	1.3-8.4	3.6-5.5
	35-52	1.1-11	0.8-8.4	3.6-5.5
	52-65	0.7-8.4	0.5-6.3	3.6-5.5
	65-80	0.7-8.4	0.5-6.3	3.6-5.5
JduA:				
Jade Run	0-11	1.7-8.3	1.3-6.2	3.6-7.0
	11-19	2.7-9.7	2.0-7.3	3.6-7.0
	19-23	2.7-9.7	2.0-7.3	3.6-7.0
	23-28	1.7-11	1.3-8.4	3.6-5.5
	28-35	1.7-11	1.3-8.4	3.6-5.5
	35-52	1.1-11	0.8-8.4	3.6-5.5
	52-65	0.7-8.4	0.5-6.3	3.6-5.5
	65-80	0.7-8.4	0.5-6.3	3.6-5.5
Urban land	---	---	---	---
KemB:				
Keyport	0-12	1.9-4.5	1.4-3.4	3.6-7.0
	12-18	12-19	8.6-14	3.6-6.5
	18-24	11-18	8.0-14	3.6-5.5
	24-32	11-18	8.0-14	3.6-5.5
	32-41	7.9-18	5.9-14	3.6-5.5
	41-55	7.1-13	5.3-9.7	3.6-5.5
	55-80	0.7-13	0.5-9.7	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
KemC2:				
Keyport, eroded------	0-9	2.0-8.5	1.5-6.4	4.3-5.5
	9-15	12-19	8.6-14	3.6-6.5
	15-21	11-18	8.0-14	3.6-5.5
	21-32	11-18	8.0-14	3.6-5.5
	32-41	7.9-18	5.9-14	3.6-5.5
	41-55	7.1-13	5.3-9.7	3.6-5.5
	55-80	0.7-13	0.5-9.7	3.6-5.5
KeoA:				
Keyport--------------	0-12	2.6-9.9	2.0-7.4	3.6-7.0
	12-18	12-19	8.6-14	3.6-6.5
	18-24	11-18	8.0-14	3.6-5.5
	24-32	11-18	8.0-14	3.6-5.5
	32-41	7.9-18	5.9-14	3.6-5.5
	41-55	7.1-13	5.3-9.7	3.6-5.5
	55-80	0.7-13	0.5-9.7	3.6-5.5
KeuB:				
Keyport--------------	0-12	1.9-4.5	1.4-3.4	3.6-7.0
	12-18	12-19	8.6-14	3.6-6.5
	18-24	11-18	8.0-14	3.6-5.5
	24-32	11-18	8.0-14	3.6-5.5
	32-41	7.9-18	5.9-14	3.6-5.5
	41-55	7.1-13	5.3-9.7	3.6-5.5
	55-80	0.7-13	0.5-9.7	3.6-5.5
Urban land-----------	---	---	---	---
KreA:				
Kresson--------------	0-6	1.2-8.5	0.9-6.4	3.6-5.5
	6-18	2.8-16	2.1-12	3.6-5.5
	18-33	2.7-16	2.0-12	3.6-5.5
	33-41	3.3-17	2.5-13	3.6-5.5
	41-80	1.2-13	0.9-10	3.6-5.5
LakB:				
Lakehurst------------	0-2	9.2-14	6.9-10	3.6-4.3
	2-4	1.3-7.1	1.0-5.3	3.6-5.5
	4-18	0.3-0.9	0.1-1.0	3.6-5.5
	18-32	1.1-6.7	0.8-5.0	3.6-5.5
	32-45	0.4-2.7	0.3-2.0	3.6-5.5
	45-54	0.4-3.1	0.3-2.3	3.6-5.5
	54-80	0.4-3.1	0.3-2.3	3.6-5.5
LasB:				
Lakewood-------------	0-3	1.3-6.0	1.0-4.5	3.6-5.0
	3-11	0.3-0.9	0.1-0.9	3.6-5.0
	11-13	1.5-6.7	1.1-5.0	3.6-5.0
	13-30	0.3-1.9	0.2-1.4	3.6-5.0
	30-46	0.3-1.9	0.2-1.4	3.6-5.0
	46-80	0.3-2.7	0.2-2.0	3.6-5.0
LatvB:				
Lakewood-------------	0-3	1.3-6.0	1.0-4.5	3.6-5.0
	3-11	0.3-0.9	0.1-0.9	3.6-5.0
	11-13	1.5-6.7	1.1-5.0	3.6-5.0
	13-30	0.3-1.9	0.2-1.4	3.6-5.0
	30-46	0.3-1.9	0.2-1.4	3.6-5.0
	46-80	0.3-2.7	0.2-2.0	3.6-5.0

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
LatvB:				
Quakerbridge---------	0-2	9.2-14	6.9-10	3.6-4.3
	2-3	1.3-7.1	1.0-5.3	3.6-5.0
	3-20	0.3-0.9	0.1-0.9	3.6-5.0
	20-24	1.5-6.7	1.1-5.0	3.6-5.0
	24-42	0.4-2.7	0.3-2.0	3.6-5.0
	42-54	0.4-3.1	0.3-2.3	3.6-5.5
	54-80	0.4-3.1	0.3-2.3	3.6-5.5
LenA:				
Lenni----------------	0-5	3.8-15	2.9-11	3.6-6.5
	5-10	13-21	9.5-16	3.6-5.5
	10-18	19-40	14-30	3.6-5.5
	18-33	12-28	9.1-21	3.6-5.5
	33-45	2.1-9.1	1.6-6.8	3.6-5.5
	45-80	1.7-7.1	1.3-5.3	3.6-5.5
MakAt:				
Manahawkin, frequently flooded--	0-13	60-160	20-80	3.6-5.5
	13-26	60-160	20-80	3.6-5.5
	26-47	60-160	20-80	3.6-5.5
	47-80	0.0-6.3	0.0-4.7	3.6-5.5
MamnAv:				
Mannington, very frequently flooded--	0-14	31-43	23-32	5.6-7.3
	14-32	11-19	8.2-14	5.6-7.3
	32-42	121-173	90-129	6.1-7.3
	42-52	95-135	90-129	6.1-7.3
	52-62	31-43	23-32	6.1-7.3
	62-90	7.6-19	5.7-14	6.1-7.3
Nanticoke, very frequently flooded--	0-5	4.5-8.4	3.4-6.3	5.6-7.3
	5-50	9.6-14	7.2-10	5.6-7.3
	50-80	6.4-21	4.8-16	5.6-7.3
MamuAv:				
Mannington, very frequently flooded--	0-14	31-43	23-32	5.6-7.3
	14-32	11-19	8.2-14	5.6-7.3
	32-42	121-173	90-129	6.1-7.3
	42-52	95-135	90-129	6.1-7.3
	52-62	31-43	23-32	6.1-7.3
	62-90	7.6-19	5.7-14	6.1-7.3
Nanticoke, very frequently flooded--	0-5	4.5-8.4	3.4-6.3	5.6-7.3
	5-50	9.6-14	7.2-10	5.6-7.3
	50-80	6.4-21	4.8-16	5.6-7.3
Udorthents-----------	0-60	9.9-21	7.4-16	5.6-7.3
MaoB:				
Marlton--------------	0-10	1.6-7.2	1.2-5.4	4.3-5.5
	10-20	3.3-14	2.5-10	4.3-5.5
	20-28	2.7-12	2.0-9.3	4.3-5.5
	28-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
MaoC:				
Marlton--------------	0-10	1.6-7.2	1.2-5.4	4.3-5.5
	10-20	3.3-14	2.5-10	4.3-5.5
	20-28	2.7-12	2.0-9.3	4.3-5.5
	28-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5
MaoC2:				
Marlton, eroded------	0-7	2.7-9.6	2.0-7.2	4.3-5.5
	7-17	3.3-14	2.5-10	4.3-5.5
	17-25	2.7-12	2.0-9.3	4.3-5.5
	25-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5
MaoD:				
Marlton--------------	0-10	1.6-7.2	1.2-5.4	4.3-5.5
	10-20	3.3-14	2.5-10	4.3-5.5
	20-28	2.7-12	2.0-9.3	4.3-5.5
	28-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5
MaoD2:				
Marlton, eroded------	0-7	2.7-9.6	2.0-7.2	4.3-5.5
	7-17	3.3-14	2.5-10	4.3-5.5
	17-25	2.7-12	2.0-9.3	4.3-5.5
	25-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5
MauB:				
Marlton--------------	0-10	2.7-9.6	2.0-7.2	4.3-5.5
	10-20	3.3-14	2.5-10	4.3-5.5
	20-28	2.7-12	2.0-9.3	4.3-5.5
	28-47	2.3-12	1.7-9.0	4.3-5.5
	47-80	1.2-11	0.9-8.1	4.3-5.5
Urban land-----------	---	---	---	---
MumA:				
Mullica--------------	0-2	9.2-14	6.9-10	3.6-4.3
	2-9	1.3-3.5	1.0-2.6	3.6-5.0
	9-14	1.3-3.6	1.0-2.7	3.6-5.0
	14-28	1.3-3.6	1.0-2.7	3.6-5.0
	28-31	0.4-3.9	0.3-2.9	3.6-5.0
	31-40	0.4-3.9	0.3-2.9	3.6-5.0
	40-80	0.5-4.3	0.4-3.2	4.5-5.0
OTKA:				
Othello--------------	0-1	9.2-14	6.9-10	3.6-4.5
	1-13	2.5-7.1	1.9-5.3	3.6-5.5
	13-32	6.1-18	4.6-13	3.6-5.5
	32-40	12-27	9.1-20	3.6-5.5
	40-60	0.9-8.4	0.7-6.3	3.6-5.5
	60-80	0.7-5.1	0.5-3.8	3.6-5.5
Fallsington----------	0-2	9.2-14	6.9-10	3.6-4.3
	2-5	2.0-11	1.5-8.4	3.6-5.5
	5-8	7.6-13	0.8-11	3.6-5.5
	8-14	7.6-13	5.7-9.5	3.6-5.5
	14-31	7.6-24	5.7-18	3.6-5.5
	31-62	0.9-11	0.7-8.4	3.6-5.5
	62-80	0.7-11	0.5-8.4	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
PEEAR:				
Pedricktown, rarely flooded-------------	0-2	9.2-14	6.9-10	3.6-4.5
	2-9	4.4-10.0	3.3-7.5	4.5-6.5
	9-22	9.7-11	7.3-8.1	4.5-6.5
	22-36	1.6-7.5	1.2-5.6	4.5-6.5
	36-40	3.6-18	2.7-14	4.5-6.5
	40-49	9.7-11	7.3-8.1	4.5-6.5
	49-56	1.6-7.5	1.2-5.6	4.5-6.5
	56-72	1.0-7.5	0.8-5.6	4.5-6.5
Askecksy, rarely flooded-------------	0-9	1.9-12	1.4-9.3	3.8-5.5
	9-11	1.1-4.7	0.8-3.5	3.8-5.5
	11-28	1.1-4.7	0.8-3.5	3.8-5.5
	28-31	1.1-4.7	0.8-3.5	3.8-5.5
	31-80	1.1-4.7	0.8-3.5	3.8-5.5
Mullica, rarely flooded-------------	0-2	9.2-14	6.9-10	3.6-4.3
	2-9	1.3-3.5	1.0-2.6	3.6-5.0
	9-14	1.3-3.6	1.0-2.7	3.6-5.0
	14-28	1.3-3.6	1.0-2.7	3.6-5.0
	28-31	0.4-3.9	0.3-2.9	3.6-5.0
	31-40	0.4-3.9	0.3-2.9	3.6-5.0
	40-80	0.5-4.3	0.4-3.2	4.5-5.0
PHG:				
Pits, sand and gravel	---	---	---	---
SabB:				
Sassafras------------	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SabC:				
Sassafras------------	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SabD:				
Sassafras------------	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SabF:				
Sassafras------------	0-12	1.1-5.2	0.8-3.9	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
SacA:				
Sassafras------------	0-12	2.2-5.6	1.7-4.2	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SacB:				
Sassafras------------	0-12	2.2-5.6	1.7-4.2	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SacC:				
Sassafras------------	0-12	2.2-5.6	1.7-4.2	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SacD:				
Sassafras------------	0-12	2.2-5.6	1.7-4.2	3.6-7.0
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
SapB:				
Sassafras------------	0-12	1.1-5.6	0.8-4.1	4.3-6.5
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5
Urban land-----------	---	---	---	---
ThfB:				
Tinton---------------	0-12	0.8-2.6	0.6-2.0	3.6-6.5
	12-26	0.4-3.6	0.4-7.2	3.6-5.5
	26-38	4.8-8.5	3.6-6.4	4.3-5.5
	38-50	0.8-4.3	0.6-3.2	3.6-5.5
	50-80	0.5-5.6	0.4-4.2	3.6-5.5
UdauB:				
Udorthents-----------	0-12	8.2-14	6.2-11	5.0-6.0
	12-72	0.3-13	0.2-9.6	5.1-5.5
Urban land-----------	---	---	---	---
UddB:				
Udorthents, dredged materials-----------	0-12	8.2-14	6.2-11	5.0-6.0
	12-72	0.3-13	0.2-9.6	5.1-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
UddcB:				
Udorthents, dredged coarse materials----	0-12	8.2-14	6.2-11	5.0-6.0
	12-72	0.3-13	0.2-9.6	5.1-5.5
UddfB:				
Udorthents, dredged fine materials------	0-12	6.0-21	4.5-16	5.0-6.0
	12-72	13-31	9.5-23	4.5-6.5
UddrB:				
Udorthents, dredged materials-----------	0-12	8.2-14	6.2-11	5.0-6.0
	12-72	0.3-13	0.2-9.6	5.1-5.5
Urban land-----------	---	---	---	---
UdrB:				
Udorthents, refuse substratum----------	0-60	9.9-21	7.4-16	5.6-7.3
UR:				
Urban land-----------	---	---	---	---
USAURB:				
Urban land-----------	---	---	---	---
Aura-----------------	0-8	2.0-5.3	1.3-3.2	3.6-5.0
	8-13	2.0-5.3	1.5-4.0	3.6-5.0
	13-22	2.0-5.3	1.5-4.0	3.6-5.0
	22-28	2.0-5.3	1.5-4.0	3.6-5.0
	28-44	5.3-11	4.0-8.2	3.6-5.0
	44-59	5.3-11	4.0-8.2	3.6-5.0
	59-80	0.5-5.3	0.4-4.0	3.6-5.0
USDOWB:				
Urban land-----------	---	---	---	---
Downer---------------	0-10	1.1-5.5	0.8-4.1	4.3-6.5
	10-16	2.1-5.3	1.6-4.0	3.6-6.5
	16-36	2.1-5.3	1.6-4.0	3.6-6.0
	36-48	0.8-4.7	0.6-3.5	3.6-5.5
	48-80	0.5-4.7	0.4-3.5	3.6-5.5
USFREB:				
Urban land-----------	---	---	---	---
Freehold-------------	0-10	1.6-8.2	1.2-6.2	4.3-6.5
	10-14	9.1-11	6.8-7.9	4.3-6.5
	14-21	8.3-24	6.2-18	4.3-5.5
	21-35	8.3-18	6.2-13	4.3-5.5
	35-80	1.5-9.7	1.1-7.3	4.3-5.5
USSASB:				
Urban land-----------	---	---	---	---
Sassafras------------	0-12	1.1-5.6	0.8-4.1	4.3-6.5
	12-18	6.2-7.1	4.7-5.3	3.6-6.5
	18-28	6.9-12	5.2-9.0	3.6-6.5
	28-40	1.1-5.7	0.8-4.3	3.6-6.0
	40-58	0.4-5.1	0.3-3.8	3.6-5.5
	58-80	0.4-5.1	0.3-3.8	3.6-5.5

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
USWESB:				
Urban land-----------	---	---	---	---
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WeeB:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WeeC:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WeeD:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WeeD2:				
Westphalia, eroded---	0-4	0.7-3.9	0.5-2.9	3.5-5.5
	4-13	0.7-4.7	0.5-3.5	3.6-6.0
	13-28	0.8-4.3	0.6-3.2	3.6-5.5
	28-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WeeF:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
WehB:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
Urban land-----------	---	---	---	---
WehC:				
Westphalia-----------	0-6	0.7-3.9	0.5-2.9	3.5-5.5
	6-15	0.7-4.7	0.5-3.5	3.6-6.0
	15-30	0.8-4.3	0.6-3.2	3.6-5.5
	30-48	0.5-2.7	0.4-2.0	3.6-5.5
	48-80	0.5-2.7	0.4-2.0	3.6-5.5
Urban land-----------	---	---	---	---

Table 20.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
WoeA:				
Woodstown-----------	0-8	2.7-6.5	2.0-4.9	3.6-7.0
	8-26	2.6-11	2.0-8.0	3.6-6.5
	26-30	10-18	7.6-13	3.6-6.0
	30-36	2.6-11	2.0-7.9	3.6-5.8
	36-80	0.7-8.4	0.5-6.3	3.6-5.5
WoeB:				
Woodstown-----------	0-8	2.7-6.5	2.0-4.9	3.6-7.0
	8-26	2.6-11	2.0-8.0	3.6-6.5
	26-30	10-18	7.6-13	3.6-6.0
	30-36	2.6-11	2.0-7.9	3.6-5.8
	36-80	0.7-8.4	0.5-6.3	3.6-5.5
WokA:				
Woodstown-----------	0-8	2.7-6.5	2.0-4.9	3.6-7.0
	8-26	2.6-11	2.0-8.0	3.6-6.5
	26-30	10-18	7.6-13	3.6-6.0
	30-36	2.6-11	2.0-7.9	3.6-5.8
	36-80	0.7-8.4	0.5-6.3	3.6-5.5
Glassboro-----------	0-11	1.9-4.5	1.4-3.4	3.6-7.0
	11-16	1.8-6.4	1.4-4.8	3.6-6.5
	16-21	1.7-4.3	1.3-3.2	3.6-6.0
	21-26	1.7-4.3	1.3-3.2	3.6-6.0
	26-40	0.7-4.3	0.5-3.2	3.6-5.5
	40-56	0.5-2.7	0.4-2.0	3.6-5.5
	56-80	0.5-4.3	0.4-3.2	3.6-5.5
WooB:				
Woodstown-----------	0-8	2.7-6.5	2.0-4.9	3.6-7.0
	8-26	2.6-11	2.0-8.0	3.6-6.5
	26-30	10-18	7.6-13	3.6-6.0
	30-36	2.6-11	2.0-7.9	3.6-5.8
	36-80	0.7-8.4	0.5-6.3	3.6-5.5
Urban land-----------	---	---	---	---

Table 21.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
AtsA:									
Atsion	---	---	---	---	0	0	Moderate	Low	High
AtsAr:									
Atsion, rarely flooded	---	---	---	---	0	0	Moderate	Low	High
AucB:									
Aura	Fragipan	15-40	15-40	Noncemented	0	0	Moderate	Low	High
AugA:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
AugB:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
AugC:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
AupB:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
AvsB:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Low	High
Sassafras	---	---	---	---	0	0	Moderate	Low	High
AvsC:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Low	High
Sassafras	---	---	---	---	0	0	Moderate	Low	High
AvtB:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
Sassafras	---	---	---	---	0	0	Moderate	Low	High
AvtC:									
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
Sassafras	---	---	---	---	0	0	Moderate	Low	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
AvtC2:									
Aura, eroded-----------	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
Sassafras, eroded------	---	---	---	---	0	0	Moderate	Low	High
AvuB:									
Aura-------------------	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
Urban land-------------	---	---	---	---	---	---	---	---	---
AvuC:									
Aura-------------------	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
Urban land-------------	---	---	---	---	---	---	---	---	---
BerAr:									
Berryland, rarely flooded---------------	---	---	---	---	0	0	Moderate	High	High
BEXAS:									
Berryland, occasionally flooded---------------	---	---	---	---	0	0	Moderate	High	High
Mullica, occasionally flooded---------------	---	---	---	---	0	0	High	High	High
BumA:									
Buddtown---------------	---	---	---	---	0	0	Moderate	Moderate	Moderate
Deptford---------------	---	---	---	---	0	0	High	High	Moderate
BuuB:									
Buddtown---------------	---	---	---	---	0	0	Moderate	Moderate	Moderate
Urban land-------------	---	---	---	---	---	---	---	---	---
ChsAt:									
Chicone, frequently flooded---------------	---	---	---	---	0	0	High	High	High
CoeAs:									
Colemantown, occasionally flooded--	---	---	---	---	0	0	High	High	High
CogB:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
CogC:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High
CokA:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High
CokB:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High
CokC:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High
CopB:									
Collington-------------	---	---	---	---	0	0	Moderate	Low	High
Urban land-------------	---	---	---	---	---	---	---	---	---
CosB:									
Colts Neck-------------	---	---	---	---	0	0	Moderate	Low	High
CosC:									
Colts Neck-------------	---	---	---	---	0	0	Moderate	Low	High
DocB:									
Downer-----------------	---	---	---	---	0	0	Moderate	Moderate	High
DocC:									
Downer-----------------	---	---	---	---	0	0	Moderate	Moderate	High
DoeA:									
Downer-----------------	---	---	---	---	0	0	Moderate	Moderate	High
DoeB:									
Downer-----------------	---	---	---	---	0	0	Moderate	Moderate	High
DouB:									
Downer-----------------	---	---	---	---	0	0	Moderate	Moderate	High
Urban land-------------	---	---	---	---	---	---	---	---	---
EveB:									
Evesboro---------------	---	---	---	---	0	0	Low	Low	High
EveC:									
Evesboro---------------	---	---	---	---	0	0	Low	Low	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In			
EveE:									
Evesboro	---	---	---	---	0	0	Low	Low	High
EvuB:									
Evesboro	---	---	---	---	0	0	Low	Low	High
Urban land	---	---	---	---	---	---	---	---	---
FamA:									
Fallsington	---	---	---	---	0	0	High	High	High
FapA:									
Fallsington	---	---	---	---	0	0	High	High	High
FauB:									
Fallsington	---	---	---	---	0	0	High	High	High
Urban land	---	---	---	---	---	---	---	---	---
FmhAt:									
Fluvaquents, loamy, frequently flooded	---	---	---	---	0	0	High	High	Moderate
FrfB:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrfC:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrkA:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrkB:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrkC:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrkD:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrkD2:									
Freehold, eroded	---	---	---	---	0	0	Moderate	Low	High
FrkE:									
Freehold	---	---	---	---	0	0	Moderate	Low	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
FrkF:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
FrrB:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
Urban land	---	---	---	---	---	---	---	---	---
FrrC:									
Freehold	---	---	---	---	0	0	Moderate	Low	High
Urban land	---	---	---	---	---	---	---	---	---
HbmB:									
Hammonton	---	---	---	---	0	0	Moderate	Moderate	High
HbrB:									
Hammonton	---	---	---	---	0	0	Moderate	Moderate	High
Urban land	---	---	---	---	---	---	---	---	---
JdrA:									
Jade Run	---	---	---	---	0	0	High	High	Moderate
JduA:									
Jade Run	---	---	---	---	0	0	High	High	Moderate
Urban land	---	---	---	---	---	---	---	---	---
KemB:									
Keyport	---	---	---	---	0	0	Moderate	High	High
KemC2:									
Keyport, eroded	---	---	---	---	0	0	Moderate	High	High
KeoA:									
Keyport	---	---	---	---	0	0	Moderate	High	High
KeuB:									
Keyport	---	---	---	---	0	0	Moderate	High	High
Urban land	---	---	---	---	---	---	---	---	---
KreA:									
Kresson	---	---	---	---	0	0	Moderate	High	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
LakB:									
Lakehurst	---	---	---	---	0	0	Low	Low	High
LasB:									
Lakewood	---	---	---	---	0	0	Low	Low	High
LatvB:									
Lakewood	---	---	---	---	0	0	Low	Low	High
Quakerbridge	---	---	---	---	0	0	Low	Low	High
LenA:									
Lenni	---	---	---	---	0	0	High	High	High
MakAt:									
Manahawkin, frequently flooded	---	---	---	---	2-5	7-13	Moderate	High	High
MamnAv:									
Mannington, very frequently flooded	---	---	---	---	0	0	High	High	High
Nanticoke, very frequently flooded	---	---	---	---	0	0	High	High	High
MamuAv:									
Mannington, very frequently flooded	---	---	---	---	0	0	High	High	High
Nanticoke, very frequently flooded	---	---	---	---	0	0	High	High	High
Udorthents	---	---	---	---	0	0	---	---	---
MaoB:									
Marlton	---	---	---	---	0	0	Moderate	High	High
MaoC:									
Marlton	---	---	---	---	0	0	Moderate	High	High
MaoC2:									
Marlton, eroded	---	---	---	---	0	0	Moderate	High	High
MaoD:									
Marlton	---	---	---	---	0	0	Moderate	High	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Depth to top	Thickness	Hardness	Subsidence: Initial	Total	Potential for frost action	Risk of corrosion: Uncoated steel	Concrete
		In	In		In	In			
MaoD2:									
Marlton, eroded--------	---	---	---	---	0	0	Moderate	High	High
MauB:									
Marlton----------------	---	---	---	---	0	0	Moderate	High	High
Urban land-------------	---	---	---	---	---	---	---	---	---
MumA:									
Mullica----------------	---	---	---	---	0	0	High	High	High
OTKA:									
Othello----------------	---	---	---	---	0	0	High	High	High
Fallsington------------	---	---	---	---	0	0	High	High	High
PEEAR:									
Pedricktown, rarely flooded---------------	---	---	---	---	0	0	High	Moderate	Moderate
Askecksy, rarely flooded---------------	---	---	---	---	0	0	None	High	High
Mullica, rarely flooded	---	---	---	---	0	0	High	High	High
PHG:									
Pits, sand and gravel--	---	---	---	---	0	0	---	Low	High
SabB:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High
SabC:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High
SabD:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High
SabF:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High
SacA:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High
SacB:									
Sassafras--------------	---	---	---	---	0	0	Moderate	Low	High

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In			
SacC:									
Sassafras	---	---	---	---	0	0	Moderate	Low	High
SacD:									
Sassafras	---	---	---	---	0	0	Moderate	Low	High
SapB:									
Sassafras	---	---	---	---	0	0	Moderate	Low	High
Urban land	---	---	---	---	---	---	---	---	---
ThfB:									
Tinton	---	---	---	---	0	0	Moderate	Low	High
UdauB:									
Udorthents	---	---	---	---	0	---	---	---	---
Urban land	---	---	---	---	0	---	---	---	---
UddB:									
Udorthents, dredged materials	---	---	---	---	0	0	---	---	---
UddcB:									
Udorthents, dredged coarse materials	---	---	---	---	0	0	---	---	---
UddfB:									
Udorthents, dredged fine materials	---	---	---	---	0	0	---	---	---
UddrB:									
Udorthents, dredged materials	---	---	---	---	0	0	---	---	---
Urban land	---	---	---	---	---	---	---	---	---
UdrB:									
Udorthents, refuse substratum	---	---	---	---	0	0	---	---	---
UR:									
Urban land	---	---	---	---	---	---	---	---	---

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
USAURB:									
Urban land	---	---	---	---	---	---	---	---	---
Aura	Fragipan	15-40	15-50	Noncemented	0	0	Moderate	Moderate	High
USDOWB:									
Urban land	---	---	---	---	---	---	---	---	---
Downer	---	---	---	---	0	0	Moderate	Moderate	High
USFREB:									
Urban land	---	---	---	---	---	---	---	---	---
Freehold	---	---	---	---	0	0	Moderate	Low	High
USSASB:									
Urban land	---	---	---	---	---	---	---	---	---
Sassafras	---	---	---	---	0	0	Moderate	Low	High
USWESB:									
Urban land	---	---	---	---	---	---	---	---	---
Westphalia	---	---	---	---	0	0	Moderate	Low	High
WeeB:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
WeeC:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
WeeD:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
WeeD2:									
Westphalia, eroded	---	---	---	---	0	0	Moderate	Low	High
WeeF:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
WehB:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
Urban land	---	---	---	---	---	---	---	---	---

Table 21.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
WehC:									
Westphalia	---	---	---	---	0	0	Moderate	Low	High
Urban land	---	---	---	---	---	---	---	---	---
WoeA:									
Woodstown	---	---	---	---	0	0	High	Moderate	High
WoeB:									
Woodstown	---	---	---	---	0	0	High	Moderate	High
WokA:									
Woodstown	---	---	---	---	0	0	High	Moderate	High
Glassboro	---	---	---	---	0	0	High	Moderate	High
WooB:									
Woodstown	---	---	---	---	0	0	High	Moderate	High
Urban land	---	---	---	---	---	---	---	---	---

Table 22.--Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
AtsA:										
Atsion--------------------	C/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
AtsAr:										
Atsion, rarely flooded----	C/D	Negligible								
			January	0.0-1.0	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			February	0.0-1.0	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			March	0.0-1.0	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			April	0.0-1.0	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			May	1.0-1.5	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			June	1.0-1.5	>6.0	---	---	None	---	---
			July	1.5-3.5	>6.0	---	---	None	---	---
			August	1.5-3.5	>6.0	---	---	None	---	---
			September	1.5-3.5	>6.0	---	---	None	---	---
			October	1.0-1.5	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			November	1.0-1.5	>6.0	0.2-0.5	Long	Rare	Brief	Rare
			December	1.0-1.5	>6.0	0.2-0.5	Long	Rare	Brief	Rare
AucB:										
Aura----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
AugA:										
Aura----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
AugB:										
Aura----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
AugC:										
Aura-----------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
AupB:										
Aura-----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
AvsB:										
Aura-----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
Sassafras------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
AvsC:										
Aura-----------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Sassafras------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
AvtB:										
Aura-----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
Sassafras------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
AvtC:										
Aura-----------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Sassafras------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
AvtC2:										
Aura, eroded---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Sassafras, eroded----------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
AvuB:										
Aura-----------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
Urban land-----------------	---	---	Jan-Dec	---	---	---	---	None	---	None
AvuC:										
Aura-----------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Urban land-----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
BerAr:										
Berryland, rarely flooded-	B/D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			February	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			March	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			April	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			May	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			June	0.5-1.0	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			July	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			August	1.5-3.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			September	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			October	0.5-1.0	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			November	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
			December	0.0-0.5	>6.0	0.0-1.0	Brief	Rare	Brief	Rare
BEXAS:										
Berryland, occasionally flooded------------------	B/D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			February	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			March	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			April	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			May	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			June	0.5-1.0	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			July	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			August	1.5-3.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			September	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			October	0.5-1.0	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			November	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			December	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
Mullica, occasionally flooded------------------	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			February	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			March	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			April	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			May	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			June	0.5-1.0	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			July	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			August	1.5-3.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			September	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			October	0.5-1.0	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			November	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional
			December	0.0-0.5	>6.0	0.0-1.0	Brief	Occasional	Brief	Occasional

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
BumA:										
Buddtown------------------	B	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
Deptford------------------	C	Very high								
			January	1.0-1.5	>6.0	---	---	None	---	None
			February	1.0-1.5	>6.0	---	---	None	---	None
			March	1.0-1.5	>6.0	---	---	None	---	None
			April	1.0-1.5	>6.0	---	---	None	---	None
			May	1.5-3.5	>6.0	---	---	None	---	None
			June	1.5-3.5	>6.0	---	---	None	---	None
			July	3.5-6.0	>6.0	---	---	None	---	None
			August	3.5-6.0	>6.0	---	---	None	---	None
			September	3.5-6.0	>6.0	---	---	None	---	None
			October	1.5-3.5	>6.0	---	---	None	---	None
			November	1.5-3.5	>6.0	---	---	None	---	None
			December	1.5-3.5	>6.0	---	---	None	---	None
BuuB:										
Buddtown------------------	B	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
ChsAt:										
Chicone, frequently flooded	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			February	0.0-0.5	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			March	0.0-0.5	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			April	0.0-0.5	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			May	0.2-1.0	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			June	0.2-1.0	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			July	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			August	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			September	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			October	0.2-1.0	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			November	0.2-1.0	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
			December	0.2-1.0	>6.0	0.0-1.0	Brief	Frequent	Brief	Frequent
CoeAs:										
Colemantown, occasionally flooded	C/D	Negligible								
			January	0.0-1.0	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			February	0.0-1.0	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			March	0.0-1.0	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			April	0.0-1.0	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			May	0.0-1.0	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			June	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			July	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			August	1.0-1.5	>6.0	0.0-0.5	Very brief	Rare	Very brief	Rare
			September	1.0-1.5	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			October	1.0-1.5	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			November	1.0-1.5	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
			December	1.0-1.5	>6.0	0.0-0.5	Very brief	Occasional	Very brief	Occasional
CogB:										
Collington	B	Low	Jan-Dec	---	---	---	---	None	---	None
CogC:										
Collington	B	Medium	Jan-Dec	---	---	---	---	None	---	None
CokA:										
Collington	B	Low	Jan-Dec	---	---	---	---	None	---	None
CokB:										
Collington	B	Low	Jan-Dec	---	---	---	---	None	---	None
CokC:										
Collington	B	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
CopB:										
Collington	B	Low	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
CosB:										
Colts Neck	B	Very low	Jan-Dec	---	---	---	---	None	---	None
CosC:										
Colts Neck	B	Low	Jan-Dec	---	---	---	---	None	---	None
DocB:										
Downer	B	Very low	Jan-Dec	---	---	---	---	None	---	None
DocC:										
Downer	B	Low	Jan-Dec	---	---	---	---	None	---	None
DoeA:										
Downer	B	Very low	Jan-Dec	---	---	---	---	None	---	None
DoeB:										
Downer	B	Very low	Jan-Dec	---	---	---	---	None	---	None
DouB:										
Downer	B	Very low	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
EveB:										
Evesboro	A	Very low	Jan-Dec	---	---	---	---	None	---	None
EveC:										
Evesboro	A	Low	Jan-Dec	---	---	---	---	None	---	None
EveE:										
Evesboro	A	Medium	Jan-Dec	---	---	---	---	None	---	None
EvuB:										
Evesboro	A	Very low	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
FamA:										
Fallsington---------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
FapA:										
Fallsington---------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
FauB:										
Fallsington---------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
FmhAt:										
Fluvaquents, loamy, frequently flooded-------	B/D	Negligible								
			January	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			February	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			March	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			April	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			May	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			September	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			October	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			November	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
			December	0.0-1.5	>6.0	0.0-0.5	Brief	Frequent	Brief	Frequent
FrfB:										
Freehold------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
FrfC:										
Freehold------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
FrkA:										
Freehold------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
FrkB:										
Freehold------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
FrkC:										
Freehold------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
FrkD:										
Freehold------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
FrkD2:										
Freehold, eroded----------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
FrkE:										
Freehold------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
FrkF:										
Freehold------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
FrrB:										
Freehold------------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FrrC:										
Freehold	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
HbmB:										
Hammonton	B	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
HbrB:										
Hammonton	B	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
JdrA:										
Jade Run------------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
JduA:										
Jade Run------------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None
KemB:										
Keyport-------------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
KemC2:										
Keyport, eroded-----------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
KeoA:										
Keyport-------------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
KeuB:										
Keyport-------------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
KeuB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
KreA:										
Kresson	C	Very high								
			January	1.0-1.5	>6.0	---	---	None	---	None
			February	1.0-1.5	>6.0	---	---	None	---	None
			March	1.0-1.5	>6.0	---	---	None	---	None
			April	1.0-1.5	>6.0	---	---	None	---	None
			May	1.5-3.5	>6.0	---	---	None	---	None
			June	1.5-3.5	>6.0	---	---	None	---	None
			July	3.5-6.0	>6.0	---	---	None	---	None
			August	3.5-6.0	>6.0	---	---	None	---	None
			September	3.5-6.0	>6.0	---	---	None	---	None
			October	1.5-3.5	>6.0	---	---	None	---	None
			November	1.5-3.5	>6.0	---	---	None	---	None
			December	1.5-3.5	>6.0	---	---	None	---	None
LakB:										
Lakehurst	A	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
LasB:										
Lakewood	A	Very low	Jan-Dec	---	---	---	---	None	---	None
LatvB:										
Lakewood	A	Very low	Jan-Dec	---	---	---	---	None	---	None
Quakerbridge	A	Very low	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
LenA:										
Lenni	C/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
MakAt:										
Manahawkin, frequently flooded	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
			February	0.0-0.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
			March	0.0-0.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
			April	0.0-0.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
			May	0.2-1.0	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			June	0.2-1.0	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			July	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			August	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			September	1.0-1.5	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			October	0.2-1.0	>6.0	0.0-0.5	Brief	Occasional	Brief	Occasional
			November	0.2-1.0	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
			December	0.2-1.0	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
MamnAv:										
Mannington, very frequently flooded	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			February	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			March	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			April	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			May	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			June	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			July	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			August	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			September	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			October	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			November	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			December	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
MamnAv:										
Nanticoke, very frequently flooded------------------	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			February	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			March	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			April	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			May	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			June	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			July	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			August	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			September	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			October	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			November	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			December	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
MamuAv:										
Mannington, very frequently flooded-------	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			February	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			March	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			April	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			May	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			June	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			July	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			August	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			September	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			October	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			November	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			December	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
Nanticoke, very frequently flooded------------------	D	Negligible								
			January	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			February	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			March	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			April	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			May	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			June	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			July	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			August	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			September	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			October	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			November	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent
			December	0.0-0.5	>6.0	0.0-1.0	Very brief	Frequent	Very brief	Very frequent

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
MamuAv:										
Udorthents	D	---								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	1.5-3.5	>6.0	---	---	None	---	None
			June	1.5-3.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.5-3.5	>6.0	---	---	None	---	None
			November	1.5-3.5	>6.0	---	---	None	---	None
			December	1.5-3.5	>6.0	---	---	None	---	None
MaoB:										
Marlton	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
MaoC:										
Marlton	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
MaoC2:										
Marlton, eroded-----------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
MaoD:										
Marlton-------------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
MaoD2:										
Marlton, eroded-----------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
MauB:										
Marlton	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
MumA:										
Mullica	D	Very high								
			January	0.0-0.5	>6.0	---	---	None	---	None
			February	0.0-0.5	>6.0	---	---	None	---	None
			March	0.0-0.5	>6.0	---	---	None	---	None
			April	0.0-0.5	>6.0	---	---	None	---	None
			May	0.2-1.0	>6.0	---	---	None	---	None
			June	0.2-1.0	>6.0	---	---	None	---	None
			July	1.0-1.5	>6.0	---	---	None	---	None
			August	1.0-1.5	>6.0	---	---	None	---	None
			September	1.0-1.5	>6.0	---	---	None	---	None
			October	0.2-1.0	>6.0	---	---	None	---	None
			November	0.2-1.0	>6.0	---	---	None	---	None
			December	0.2-1.0	>6.0	---	---	None	---	None
OTKA:										
Othello	C/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
OTKA:										
Fallsington----------------	B/D	Very high								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	1.0-1.5	>6.0	---	---	None	---	None
			June	1.0-1.5	>6.0	---	---	None	---	None
			July	1.5-3.5	>6.0	---	---	None	---	None
			August	1.5-3.5	>6.0	---	---	None	---	None
			September	1.5-3.5	>6.0	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	---	None
			November	1.0-1.5	>6.0	---	---	None	---	None
			December	1.0-1.5	>6.0	---	---	None	---	None
PEEAR:										
Pedricktown, rarely flooded------------------	D	Negligible								
			January	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			February	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			March	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			April	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			May	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			June	0.2-1.0	>6.0	0.0-0.0	---	None	Very brief	Very rare
			July	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			August	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			September	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			October	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			November	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			December	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
Askecksy, rarely flooded--	A/D	Negligible								
			January	0.0-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			February	0.0-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			March	0.0-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			April	0.0-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			May	1.0-1.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			June	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			July	1.5-3.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			August	1.5-3.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			September	1.5-3.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			October	1.0-1.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			November	1.0-1.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			December	1.0-1.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
PEEAR:										
Mullica, rarely flooded---	D	Negligible								
			January	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			February	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			March	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			April	0.0-0.5	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			May	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			June	0.2-1.0	>6.0	0.0-0.0	---	None	Very brief	Very rare
			July	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			August	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			September	1.0-1.5	>6.0	0.0-0.0	---	None	Very brief	Very rare
			October	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			November	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
			December	0.2-1.0	>6.0	0.0-0.5	Brief	Rare	Brief	Rare
PHG:										
Pits, sand and gravel-----	---	---	Jan-Dec	---	---	---	---	None	---	None
SabB:										
Sassafras-----------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
SabC:										
Sassafras-----------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
SabD:										
Sassafras-----------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
SabF:										
Sassafras-----------------	B	High	Jan-Dec	---	---	---	---	None	---	None
SacA:										
Sassafras-----------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
SacB:										
Sassafras-----------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
SacC:										
Sassafras-----------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
SacD:										
Sassafras-----------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
SapB:										
Sassafras-----------------	B	Low	Jan-Dec	---	---	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
ThfB:										
Tinton	A	Very low	Jan-Dec	---	---	---	---	None	---	None
UdauB:										
Udorthents	D	Medium	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
UddB:										
Udorthents, dredged materials	B	Medium	Jan-Dec	---	---	---	---	None	---	None
UddcB:										
Udorthents, dredged coarse materials	A	Medium	Jan-Dec	---	---	---	---	None	---	None
UddfB:										
Udorthents, dredged fine materials	D	Medium	Jan-Dec	---	---	---	---	None	---	None
UddrB:										
Udorthents, dredged materials	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
UdrB:										
Udorthents, refuse substratum	D	Low	Jan-Dec	---	---	---	---	None	---	None
UR:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
USAURB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
Aura	B	Low	Jan-Dec	---	---	---	---	None	---	None
USDOWB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
Downer	B	Very low	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
USFREB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
Freehold	B	Low	Jan-Dec	---	---	---	---	None	---	None
USSASB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
Sassafras	B	Low	Jan-Dec	---	---	---	---	None	---	None
USWESB:										
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
Westphalia	B	Low	Jan-Dec	---	---	---	---	None	---	None
WeeB:										
Westphalia	B	Low	Jan-Dec	---	---	---	---	None	---	None
WeeC:										
Westphalia	B	Medium	Jan-Dec	---	---	---	---	None	---	None
WeeD:										
Westphalia	B	Medium	Jan-Dec	---	---	---	---	None	---	None
WeeD2:										
Westphalia, eroded	B	Medium	Jan-Dec	---	---	---	---	None	---	None
WeeF:										
Westphalia	B	High	Jan-Dec	---	---	---	---	None	---	None
WehB:										
Westphalia	B	Low	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None
WehC:										
Westphalia	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Urban land	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
WoeA:										
Woodstown-----------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
WoeB:										
Woodstown-----------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
WokA:										
Woodstown-----------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None

Table 22.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
WokA:										
Glassboro-----------------	C	Very high								
			January	1.0-1.5	>6.0	---	---	None	---	None
			February	1.0-1.5	>6.0	---	---	None	---	None
			March	1.0-1.5	>6.0	---	---	None	---	None
			April	1.0-1.5	>6.0	---	---	None	---	None
			May	1.5-3.5	>6.0	---	---	None	---	None
			June	1.5-3.5	>6.0	---	---	None	---	None
			July	3.5-6.0	>6.0	---	---	None	---	None
			August	3.5-6.0	>6.0	---	---	None	---	None
			September	3.5-6.0	>6.0	---	---	None	---	None
			October	1.5-3.5	>6.0	---	---	None	---	None
			November	1.5-3.5	>6.0	---	---	None	---	None
			December	1.5-3.5	>6.0	---	---	None	---	None
WooB:										
Woodstown-----------------	C	Very high								
			January	1.5-3.5	>6.0	---	---	None	---	None
			February	1.5-3.5	>6.0	---	---	None	---	None
			March	1.5-3.5	>6.0	---	---	None	---	None
			April	1.5-3.5	>6.0	---	---	None	---	None
			May	3.5-6.0	>6.0	---	---	None	---	None
			June	3.5-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	3.5-6.0	>6.0	---	---	None	---	None
			November	3.5-6.0	>6.0	---	---	None	---	None
			December	3.5-6.0	>6.0	---	---	None	---	None
Urban land----------------	---	---	Jan-Dec	---	---	---	---	None	---	None

Table 23.--Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Askecksy	Siliceous, mesic Typic Psammaquents
Atsion	Sandy, siliceous, mesic Aeric Alaquods
Aura	Coarse-loamy, siliceous, semiactive, mesic Typic Fragiudults
Berryland	Sandy, siliceous, mesic Typic Alaquods
Buddtown	Coarse-loamy, mixed, active, mesic Aquic Hapludults
Chicone	Coarse-silty, mixed, active, acid, mesic Thapto-Histic Fluvaquents
Colemantown	Fine, glauconitic, mesic Typic Albaquults
Collington	Fine-loamy, mixed, active, mesic Typic Hapludults
*Colts Neck	Fine-loamy, mixed, active, mesic Humic Hapludults
Deptford	Coarse-loamy, mixed, active, mesic Aeric Endoaquults
Downer	Coarse-loamy, siliceous, semiactive, mesic Typic Hapludults
Evesboro	Mesic, coated Typic Quartzipsamments
Fallsington	Fine-loamy, mixed, active, mesic Typic Endoaquults
Fluvaquents	Fluvaquents
Freehold	Fine-loamy, mixed, active, mesic Typic Hapludults
Glassboro	Coarse-loamy, siliceous, semiactive, mesic Aeric Endoaquults
Hammonton	Coarse-loamy, siliceous, semiactive, mesic Aquic Hapludults
Jade Run	Coarse-loamy, mixed, active, acid, mesic Typic Endoaquepts
Keyport	Fine, mixed, semiactive, mesic Aquic Hapludults
Kresson	Fine, glauconitic, mesic Aquic Hapludults
Lakehurst	Mesic, coated Aquodic Quartzipsamments
Lakewood	Mesic, coated Spodic Quartzipsamments
Lenni	Fine, mixed, active, mesic Typic Endoaquults
Manahawkin	Sandy or sandy-skeletal, siliceous, dysic, mesic Terric Haplosaprists
Mannington	Fine-silty, mixed, active, nonacid, mesic Thapto-Histic Hydraquents
Marlton	Fine, glauconitic, mesic Aquic Hapludults
Mullica	Coarse-loamy, siliceous, semiactive, acid, mesic Typic Humaquepts
Nanticoke	Fine-silty, mixed, active, nonacid, mesic Typic Hydraquents
Othello	Fine-silty, mixed, active, mesic Typic Endoaquults
Pedricktown	Coarse-loamy, mixed, active, acid, mesic Humaqueptic Fluvaquents
Quakerbridge	Mesic, coated Spodic Quartzipsamments
Sassafras	Fine-loamy, siliceous, semiactive, mesic Typic Hapludults
Tinton	Loamy, mixed, semiactive, mesic Arenic Hapludults
Udorthents	Udorthents
Westphalia	Coarse-loamy, siliceous, semiactive, mesic Inceptic Hapludults
Woodstown	Fine-loamy, mixed, active, mesic Aquic Hapludults

Table 24.--Relationship Between Major Landforms, Soil Characteristics, and Drainage of Soils

Soil characteristics	Excessively drained and somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	MINERAL SOILS ON UPLANDS AND LOWLANDS; NOT SUBJECT TO FREQUENT FLOODING					
SANDY SUBSOIL						
Do not have spodic or spodic-like materials	Evesboro				Askecksy	
Spodic or spodic-like materials below a bleached layer	Lakewood Quakerbridge		Lakehurst		Atsion	Berryland
LOAMY SUBSOIL						
Dominantly sandy loam subsoil						
Without fragipan		Downer	Hammonton	Glassboro		Mullica
With fragipan		Aura				
Dominantly fine sandy loam or very fine sandy loam subsoil		Westphalia	Buddtown	Deptford	Jade Run	
Texture varies throughout, loamy and sandy recent alluvial deposits						Pedricktown
Dominantly sandy clay loam subsoil						
Without glauconite		Sassafras	Woodstown		Fallsington	
Low content of glauconite		Colts Neck Freehold				
Moderate content of glauconite		Collington				
Low or moderate content of glauconite and a sandy surface layer that is more than 20 inches thick		Tinton				
Dominantly silt loam or silty clay loam subsoil					Othello	
Texture varies throughout but dominantly recent loamy deposits from human activity		Udorthents	Udorthents			

Table 24.--Relationship Between Major Landforms, Soil Characteristics, and Drainage of Soils--Continued

Soil characteristics	Excessively drained and somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	MINERAL SOILS ON UPLANDS AND LOWLANDS; NOT SUBJECT TO FREQUENT FLOODING					
CLAYEY SUBSOIL						
Without glauconite			Keyport		Lenni	
High content of glauconite			Marlton	Kresson	Colemantown	
	SOILS ON FLOOD PLAINS AND LOWLANDS; SUBJECT TO FREQUENT FLOODING					
ALLUVIAL SEDIMENTS OR ORGANIC MATERIALS						
Dominantly loamy textured recent alluvial sediments throughout				Fluvaquents	Fluvaquents	
Silty textured recent alluvial sediments underlain by organic layers 16 to 45 inches thick						Chicone
Organic layers 16 to 51 inches thick underlain by sandy marine sediments						Manahawkin
	SOILS ON TIDALLY INFLUENCED ESTUARINE MARSHES; SUBJECT TO DAILY FLOODING					
SILTY ESTUARINE MARSHES						
Silty textured mineral layers throughout						Nanticoke
Silty textured mineral layers underlain by organic layers 10 to 35 inches thick						Mannington

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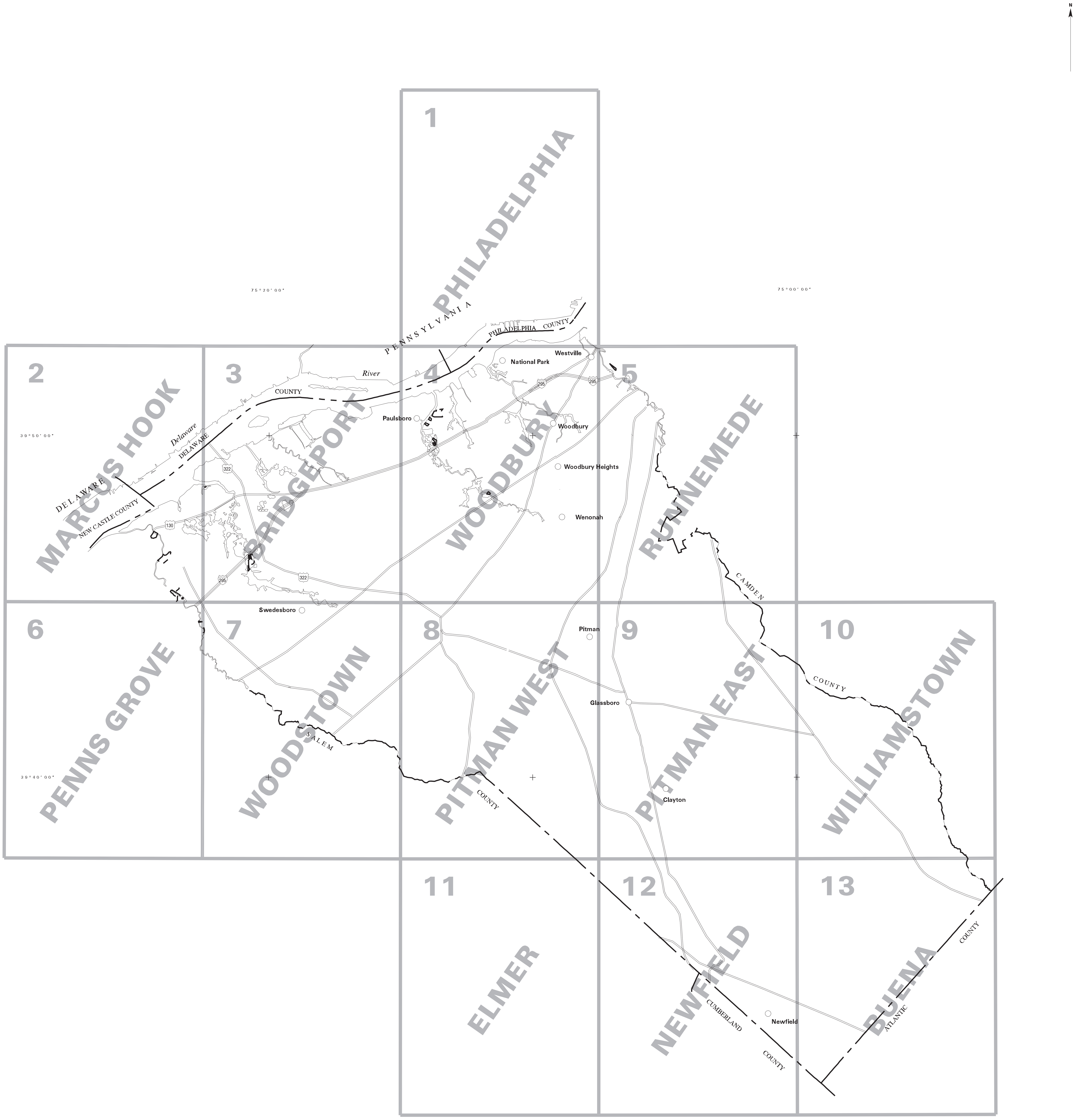

INDEX TO MAP SHEETS
GLOUCESTER COUNTY, NEW JERSEY

MILES

KILOMETERS

SCALE = 1:125000

SOIL LEGEND

SYMBOL	NAME
AtsA	Atsion sand, 0 to 2 percent slopes
AtsAr	Atsion sand, 0 to 2 percent slopes, rarely flooded
AucB	Aura loamy sand, 0 to 5 percent slopes
AugA	Aura sandy loam, 0 to 2 percent slopes
AugB	Aura sandy loam, 2 to 5 percent slopes
AugC	Aura sandy loam, 5 to 10 percent slopes
AupB	Aura loam, 2 to 5 percent slopes
AvsB	Aura-Sassafras loamy sands, 0 to 5 percent slopes
AvsC	Aura-Sassafras loamy sands, 5 to 10 percent slopes
AvtB	Aura-Sassafras sandy loams, 2 to 5 percent slopes
AvtC	Aura-Sassafras sandy loams, 5 to 10 percent slopes
AvtC2	Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded
AvuB	Aura-Urban land complex, 0 to 5 percent slopes
AvuC	Aura-Urban land complex, 5 to 10 percent slopes
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded
BEXAS	Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded
BumA	Buddtown-Deptford complex, 0 to 2 percent slopes
BuuB	Buddtown-Urban land complex, 0 to 5 percent slopes
ChsAt	Chicone silt loam, 0 to 1 percent slopes, frequently flooded
CoeAs	Colemantown loam, 0 to 2 percent slopes, occasionally flooded
CogB	Collington loamy sand, 0 to 5 percent slopes
CogC	Collington loamy sand, 5 to 10 percent slopes
CokA	Collington sandy loam, 0 to 2 percent slopes
CokB	Collington sandy loam, 2 to 5 percent slopes
CokC	Collington sandy loam, 5 to 10 percent slopes
CopB	Collington-Urban land complex, 0 to 5 percent slopes
CosB	Colts Neck sandy loam, 2 to 5 percent slopes
CosC	Colts Neck sandy loam, 5 to 10 percent slopes
DocB	Downer loamy sand, 0 to 5 percent slopes
DocC	Downer loamy sand, 5 to 10 percent slopes
DoeA	Downer sandy loam, 0 to 2 percent slopes
DoeB	Downer sandy loam, 2 to 5 percent slopes
DouB	Downer-Urban land complex, 0 to 5 percent slopes
EveB	Evesboro sand, 0 to 5 percent slopes
EveC	Evesboro sand, 5 to 10 percent slopes
EveE	Evesboro sand, 15 to 25 percent slopes
EvuB	Evesboro-Urban land complex, 0 to 5 percent slopes
FamA	Fallsington sandy loam, 0 to 2 percent slopes
FapA	Fallsington loam, 0 to 2 percent slopes
FauB	Fallsington-Urban land complex, 0 to 5 percent slopes
FmhAt	Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded
FrfB	Freehold loamy sand, 0 to 5 percent slopes
FrfC	Freehold loamy sand, 5 to 10 percent slopes
FrkA	Freehold sandy loam, 0 to 2 percent slopes
FrkB	Freehold sandy loam, 2 to 5 percent slopes
FrkC	Freehold sandy loam, 5 to 10 percent slopes
FrkD	Freehold sandy loam, 10 to 15 percent slopes
FrkD2	Freehold sandy loam, 10 to 15 percent slopes, eroded
FrkE	Freehold sandy loam, 15 to 25 percent slopes
FrkF	Freehold sandy loam, 25 to 40 percent slopes
FrrB	Freehold-Urban land complex, 0 to 5 percent slopes
FrrC	Freehold-Urban land complex, 5 to 10 percent slopes
HbmB	Hammonton loamy sand, 0 to 5 percent slopes
HbrB	Hammonton-Urban land complex, 0 to 5 percent slopes
JdrA	Jade Run fine sandy loam, 0 to 2 percent slopes
JduA	Jade Run-Urban land complex, 0 to 2 percent slopes

SYMBOL	NAME
KemB	Keyport sandy loam, 2 to 5 percent slopes
KemC2	Keyport sandy loam, 5 to 10 percent slopes, eroded
KeoA	Keyport loam, 0 to 2 percent slopes
KeuB	Keyport-Urban land complex, 0 to 5 percent slopes
KreA	Kresson fine sandy loam, 0 to 2 percent slopes
LakB	Lakehurst sand, 0 to 5 percent slopes
LasB	Lakewood sand, 0 to 5 percent slopes
LatvB	Lakewood-Quakerbridge complex, 0 to 5 percent slopes
LenA	Lenni loam, 0 to 2 percent slopes
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded
MamnAv	Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded
MamuAv	Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded
MaoB	Marlton sandy loam, 2 to 5 percent slopes
MaoC	Marlton sandy loam, 5 to 10 percent slopes
MaoC2	Marlton sandy loam, 5 to 10 percent slopes, eroded
MaoD	Marlton sandy loam, 10 to 15 percent slopes
MaoD2	Marlton sandy loam, 10 to 15 percent slopes, eroded
MauB	Marlton-Urban land complex, 0 to 5 percent slopes
MumA	Mullica sandy loam, 0 to 2 percent slopes
OTKA	Othello and Fallsington soils, 0 to 2 percent slopes
PEEAR	Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded
PHG	Pits, sand and gravel
SabB	Sassafras loamy sand, 0 to 5 percent slopes
SabC	Sassafras loamy sand, 5 to 10 percent slopes
SabD	Sassafras loamy sand, 10 to 15 percent slopes
SabF	Sassafras loamy sand, 15 to 40 percent slopes
SacA	Sassafras sandy loam, 0 to 2 percent slopes
SacB	Sassafras sandy loam, 2 to 5 percent slopes
SacC	Sassafras sandy loam, 5 to 10 percent slopes
SacD	Sassafras sandy loam, 10 to 15 percent slopes
SapB	Sassafras-Urban land complex, 0 to 5 percent slopes
ThfB	Tinton sand, 0 to 5 percent slopes
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes
UddB	Udorthents, dredged materials, 0 to 8 percent slopes
UddcB	Udorthents, dredged coarse materials, 0 to 8 percent slopes
UddfB	Udorthents, dredged fine materials, 0 to 8 percent slopes
UddrB	Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes
UdrB	Udorthents, refuse substratum, 0 to 8 percent slopes
UR	Urban land
USAURB	Urban land-Aura complex, 0 to 5 percent slopes
USDOWB	Urban land-Downer complex, 0 to 5 percent slopes
USFREB	Urban land-Freehold complex, 0 to 5 percent slopes
USSASB	Urban land-Sassafras complex, 0 to 5 percent slopes
USWESB	Urban land-Westphalia complex, 0 to 5 percent slopes
WATER	Water
WeeB	Westphalia fine sandy loam, 2 to 5 percent slopes
WeeC	Westphalia fine sandy loam, 5 to 10 percent slopes
WeeD	Westphalia fine sandy loam, 10 to 15 percent slopes
WeeD2	Westphalia fine sandy loam, 10 to 15 percent slopes, eroded
WeeF	Westphalia fine sandy loam, 15 to 40 percent slopes
WehB	Westphalia-Urban land complex, 0 to 5 percent slopes
WehC	Westphalia-Urban land complex, 5 to 10 percent slopes
WoeA	Woodstown sandy loam, 0 to 2 percent slopes
WoeB	Woodstown sandy loam, 2 to 5 percent slopes
WokA	Woodstown-Glassboro complex, 0 to 2 percent slopes
WooB	Woodstown-Urban land complex, 0 to 5 percent slopes

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

- National, state, or province
- County or parish
- Minor civil division
- Reservation (national forest or park, state forest or park)
- Land grant
- Limit of soil survey and/or denied access area
- Field sheet matchline & neatline
- Previously Published Survey

OTHER BOUNDARY

- Airport, airfield
- Cemetery
- City/county park

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNER
(section and land grants)

GEOGRAPHIC COORDINATE TICK

TRANSPORTATION

- Divided roads
- Other roads
- Trail

ROAD EMBLEMS AND DESIGNATIONS

- Interstate — 173, 79 345
- Federal — 287, 410 224
- State — 52, 52 347
- County, farm or ranch — 1283

RAILROAD

POWER TRANSMISSION LINE

PIPELINE

FENCE

LEVEES

- Without road
- With road
- With railroad
- Single side slope (showing actual feature location)

DAMS

- Medium or Small

LANDFORM FEATURES

- Prominent hill or peak
- Soil Sample Site

CULTURAL FEATURES

MISCELLANEOUS CULTURAL FEATURES

- Farmstead, house
- Church
- School
- Other Religion — Mt Carmel
- Located object — Ranger Station
- Tank — Petroleum
- Lookout Tower
- Oil and/or Natural Gas Wells
- Windmill
- Lighthouse

HYDROGRAPHIC FEATURES

STREAMS

- Perennial, double line
- Perennial, single line
- Intermittent
- Drainage end

DRAINAGE AND IRRIGATION

- Double-line canal — CANAL
- Perennial drainage and/or irrigation ditch
- Intermittent drainage and/or irrigation ditch

SMALL LAKES, PONDS, AND RESERVOIRS

- Perennial water
- Miscellaneous water
- Flood pool line — FLOOD POOL LINE

MISCELLANEOUS WATER FEATURES

- Spring
- Well, artesian
- Well, irrigation

SPECIAL SYMBOLS FOR SOIL SURVEY AND SSURGO

SOIL DELINEATIONS AND SYMBOLS — FrfB SabB

LANDFORM FEATURES

- Bedrock escarpments
- Other than bedrock escarpments
- Short steep slope
- Gully
- Depression, closed
- Sinkhole

EXCAVATIONS

- Borrow pits
- Gravel pit
- Mine or quarry
- Landfill

MISCELLANEOUS SURFACE FEATURES

- Blowout
- Clay spot
- Gravelly spot
- Lava flow
- Marsh or swamp
- Rock outcrop (includes sandstone and shale)
- Saline spot
- Sandy spot
- Severely eroded spot
- Slide or slip
- Sodic spot
- Spoil area
- Stony spot
- Very stony spot
- Wet spot

75°15′00″ 75°12′30″ 75°10′00″ 75°07′30″

40°00′00″ 40°00′00″

39°57′30″ 39°57′30″

39°55′00″ 39°55′00″

39°52′30″ 39°52′30″

75°15′00″ 75°12′30″ 75°10′00″ 75°07′30″

Joins sheet 3, Bridgeport

Joins sheet 4, Woodbury

Joins sheet 5, Runnemede

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 18.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

3 4 5

3 BRIDGEPORT
4 WOODBURY
5 RUNNEMEDE

INDEX TO ADJOINING 7.5 MAPS

PHILADELPHIA, NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 1 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

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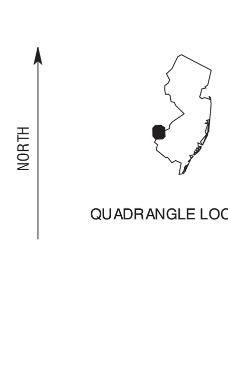
North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.



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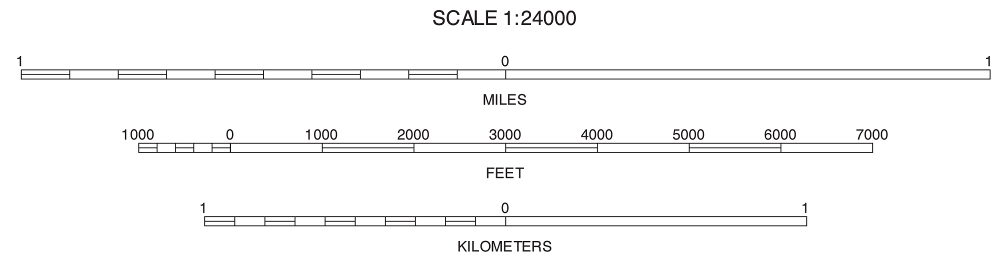
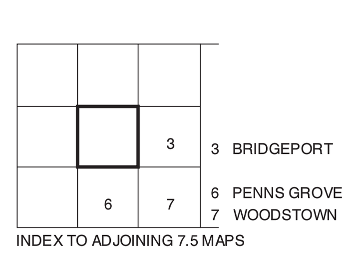




INDEX TO ADJOINING 7.5 MAPS

MARCUS HOOK, NEW JERSEY

7.5 MINUTE SERIES
SHEET NUMBER 2 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
BRIDGEPORT QUADRANGLE
SHEET NUMBER 3 OF 13

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

		1
2		4
6	7	8

1 PHILADELPHIA
2 MARCUS HOOK
4 WOODBURY
6 PENNS GROVE
7 WOODSTOWN
8 PITMAN WEST

INDEX TO ADJOINING 7.5 MAPS

BRIDGEPORT, NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

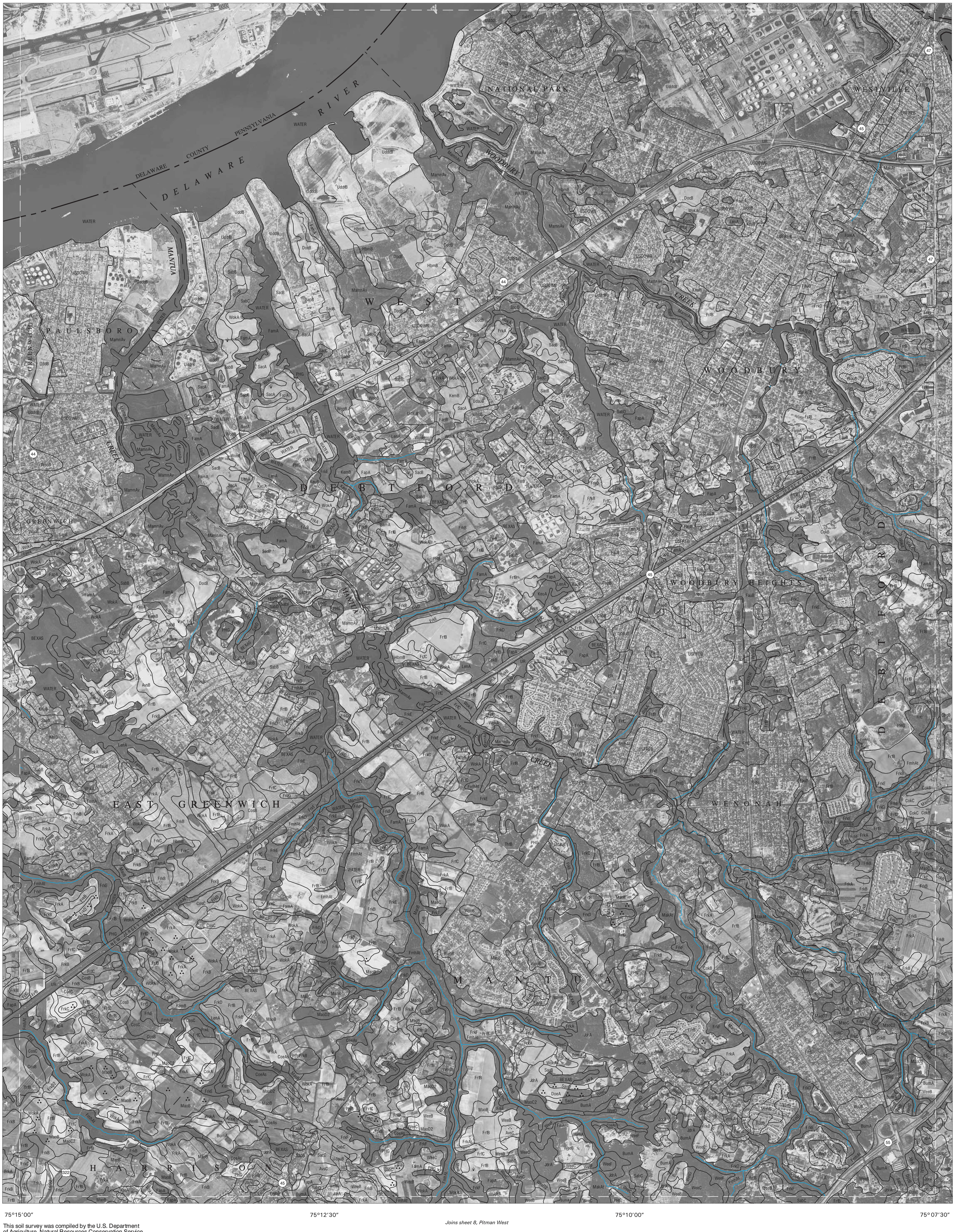
UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
WOODBURY QUADRANGLE
SHEET NUMBER 4 OF 13

Joins sheet 1, Philadelphia

75°15′00″ 75°12′30″ 75°10′00″ 75°07′30″

39°52′30″ 39°52′30″



39°50′00″ 39°50′00″

Joins sheet 3, Bridgeport

Joins sheet 5, Runnemede

39°47′30″ 39°47′30″

39°45′00″ 39°45′00″

75°15′00″ 75°12′30″ 75°10′00″ 75°07′30″

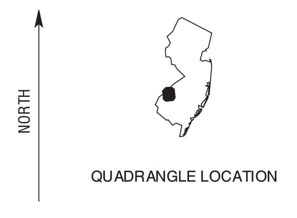
Joins sheet 7, Woodstown

Joins sheet 8, Pitman West

Joins sheet 9, Pitman East

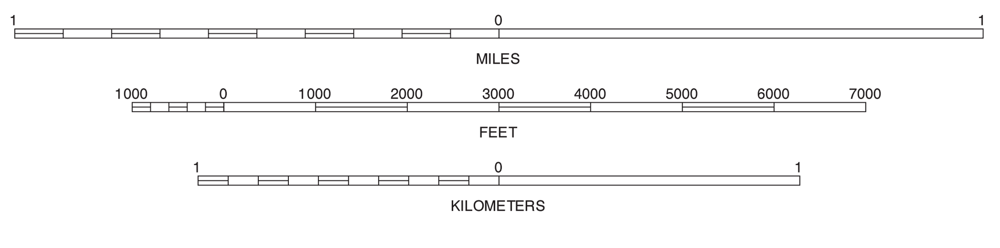
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

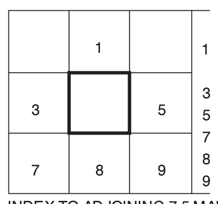
North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.



QUADRANGLE LOCATION

SCALE 1:24000





1 PHILADELPHIA
3 BRIDGEPORT
5 RUNNEMEDE
7 WOODSTOWN
8 PITMAN WEST
9 PITMAN EAST

INDEX TO ADJOINING 7.5 MAPS

WOODBURY, NEW JERSEY

7.5 MINUTE SERIES

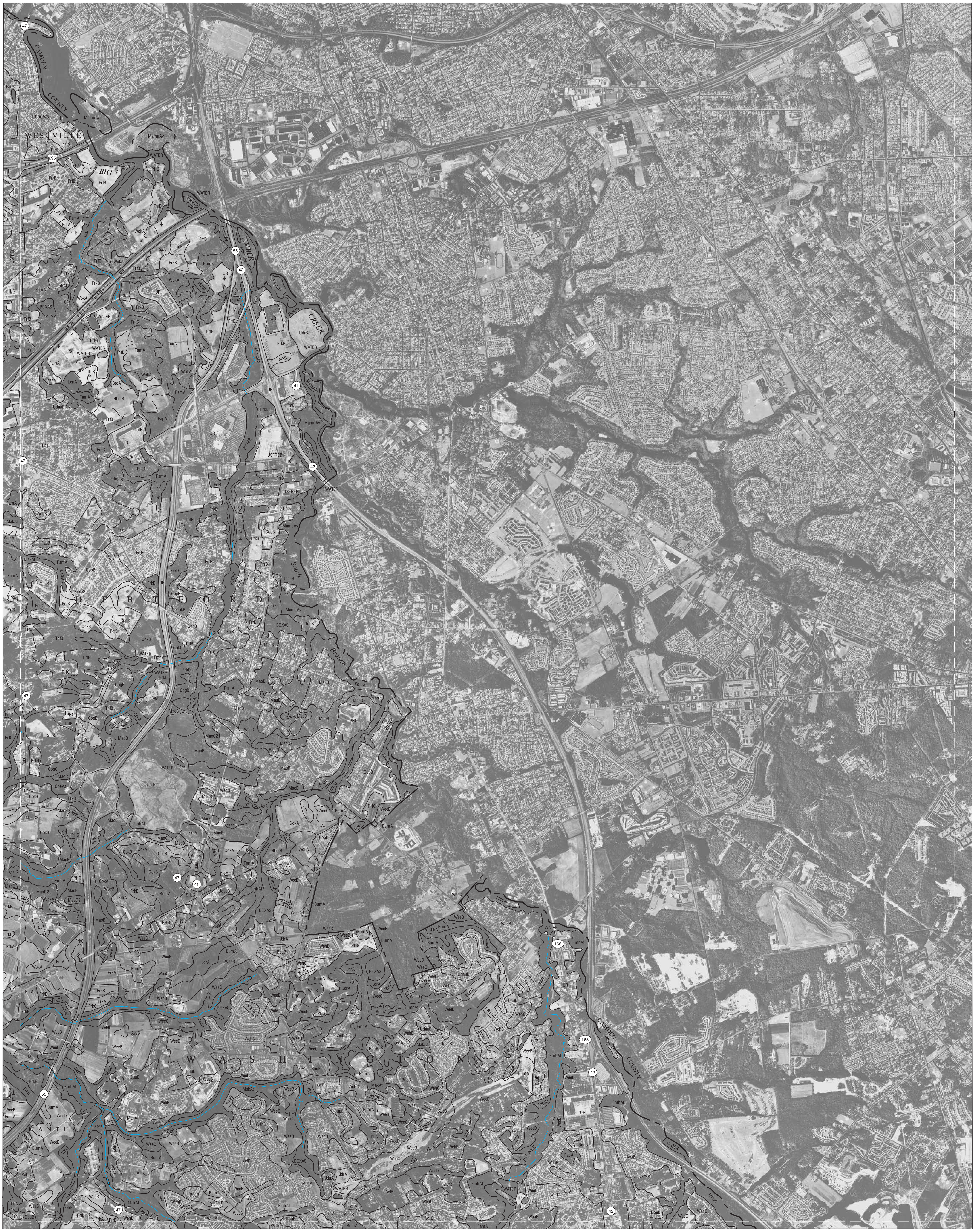
SHEET NUMBER 4 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

Joins sheet 1, Philadelphia

75° 07′30″ 75° 05′00″ 75° 02′30″ 75° 00′00″

39° 52′30″



39° 50′00″

39° 47′30″

39° 45′00″

Joins sheet 4, Woodbury

75° 07′30″ 75° 05′00″ 75° 02′30″ 75° 00′00″

Joins sheet 8, Pitman West

Joins sheet 9, Pitman East

Joins sheet 10, Williamstown

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

1		
4		
8	9	10

1 PHILADELPHIA
4 WOODBURY
8 PITMAN WEST
9 PITMAN EAST
10 WILLIAMSTOWN

INDEX TO ADJOINING 7.5 MAPS

RUNNEMEDE, NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 5 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

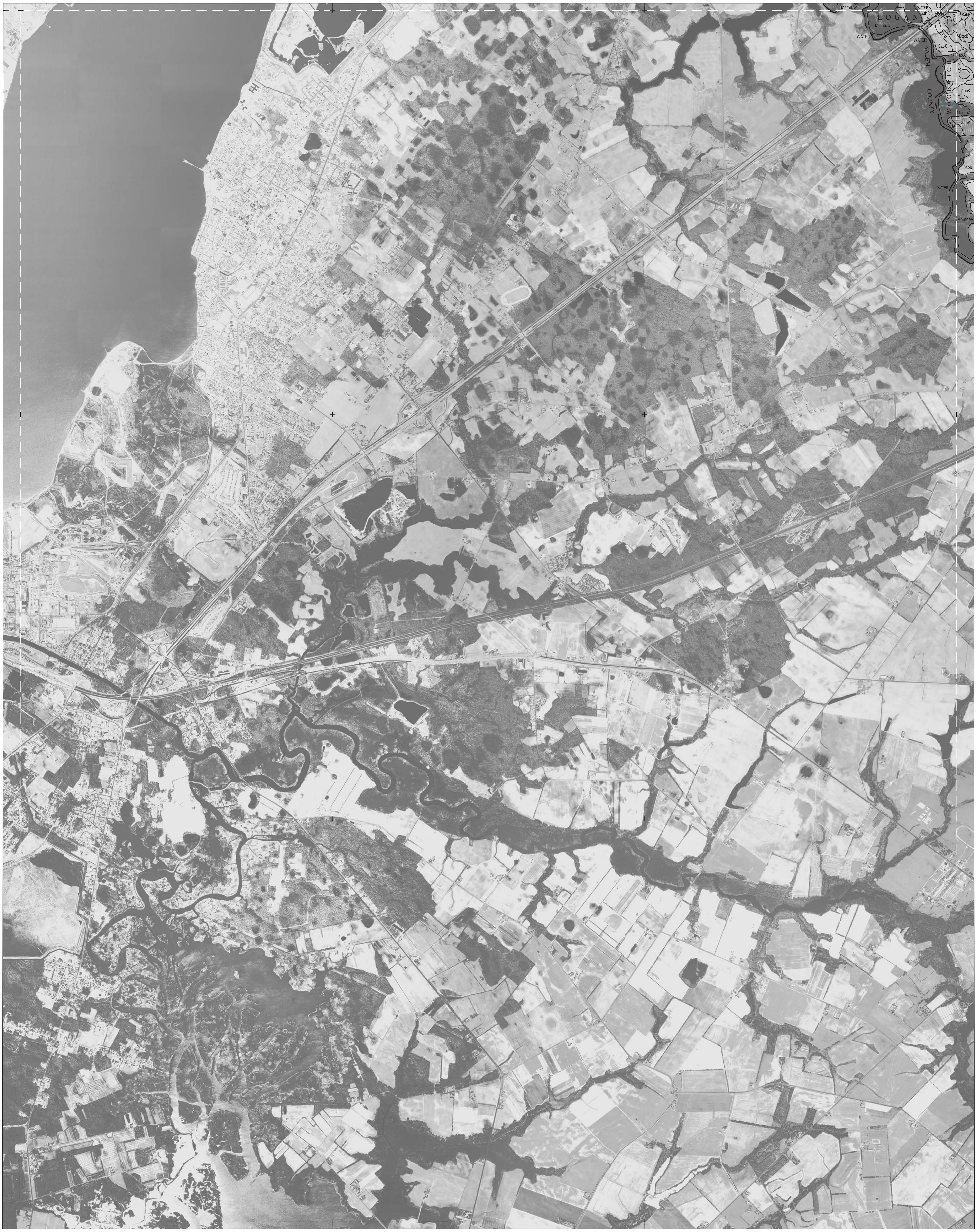
GLOUCESTER COUNTY, NEW JERSEY
PENNS GROVE QUADRANGLE
SHEET NUMBER 6 OF 13

Joins sheet 2, Marcus Hook

Joins sheet 3, Bridgeport

75° 30'00" 75° 27'30" 75° 25'00" 75° 22'30"

39° 45'00"



39° 42'30"

39° 40'00"

39° 37'30"

Joins sheet 7, Woodstown

75° 30'00" 75° 27'30" 75° 25'00" 75° 22'30"

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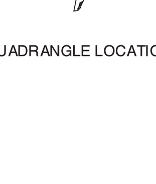
North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH



QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

	2	3
	■	7

2 MARCUS HOOK
3 BRIDGEPORT
7 WOODSTOWN

INDEX TO ADJOINING 7.5 MAPS

PENNS GROVE, NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 6 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
WOODSTOWN QUADRANGLE (OVERSIZED)
SHEET NUMBER 7 OF 13

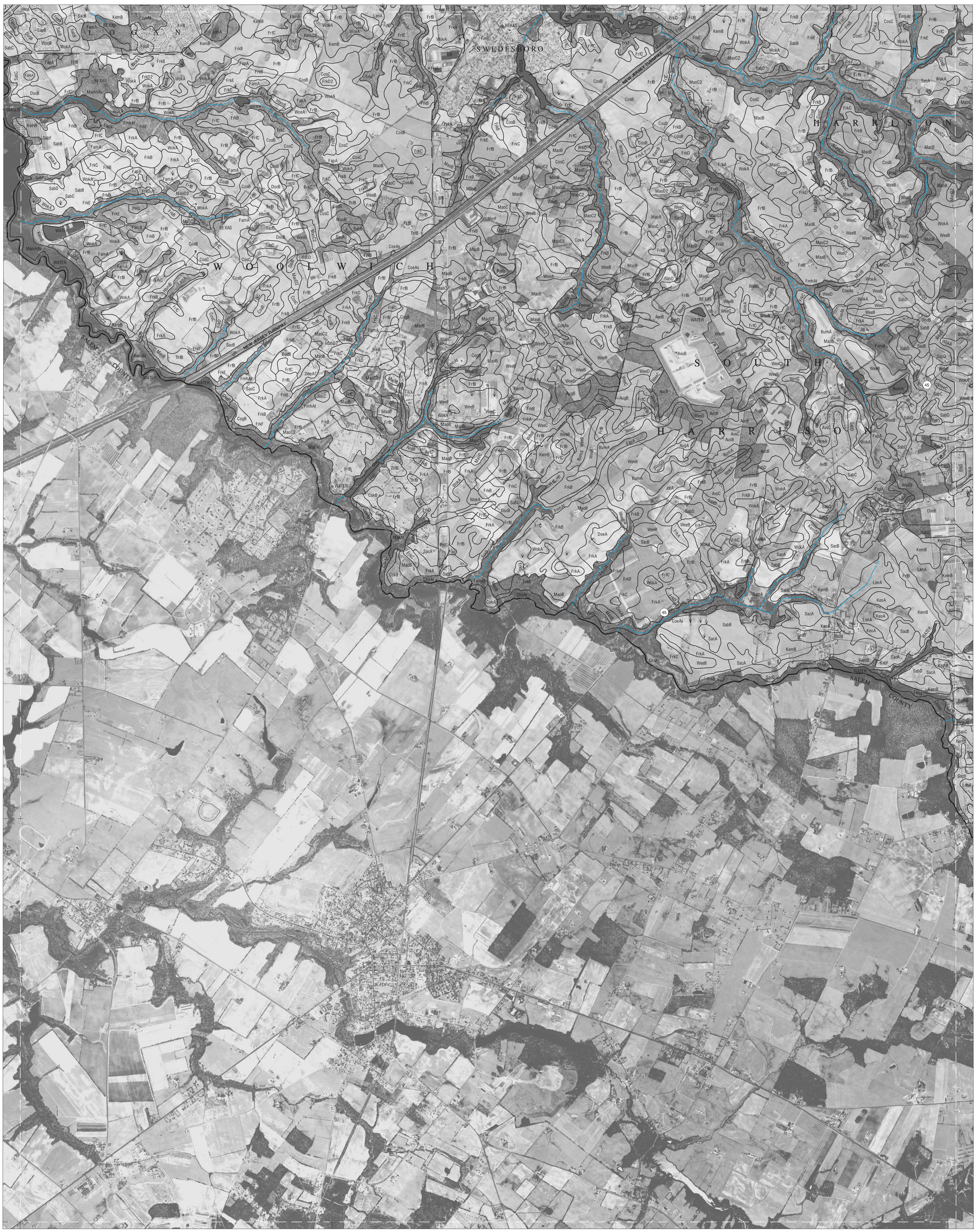
Joins sheet 2, Marcus Hook

Joins sheet 3, Bridgeport

Joins sheet 4, Woodbury

75° 22′30″ | 75° 20′00″ | 75° 17′30″ | 75° 15′00″

39° 45′00″



39° 42′30″

39° 40′00″

39° 37′30″

Joins sheet 6, Penns Grove

Joins sheet 8, Pitman West

75° 22′30″ | 75° 20′00″ | 75° 17′30″ | 75° 15′00″

Joins sheet 11, Elmer

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

2	3	4
6		8
		11

2 MARCUS HOOK
3 BRIDGEPORT
4 WOODBURY
6 PENNS GROVE
8 PITMAN WEST
11 ELMER

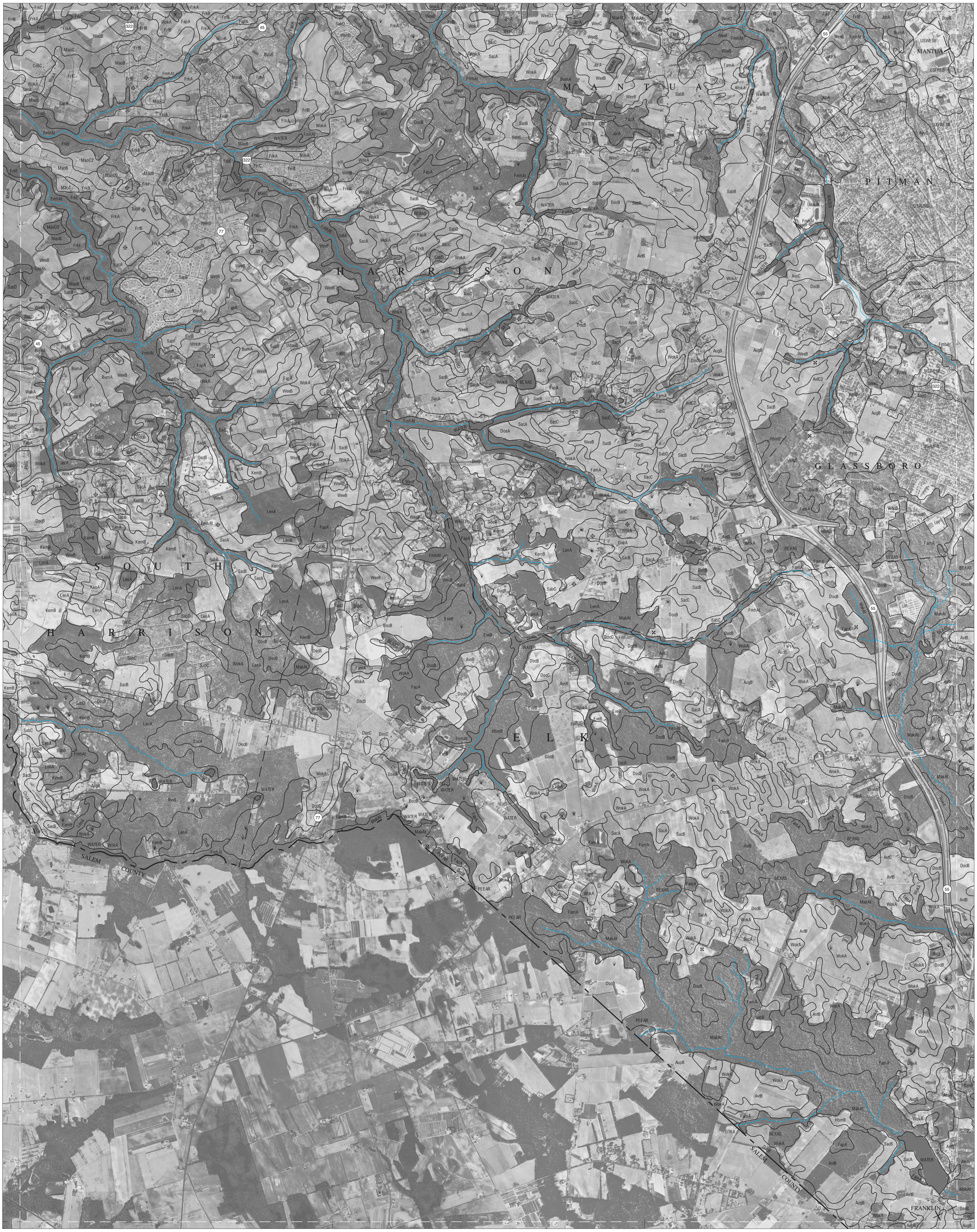
INDEX TO ADJOINING 7.5 MAPS

WOODSTOWN, (OVERSIZED) NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 7 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
PITMAN WEST QUADRANGLE
SHEET NUMBER 8 OF 13



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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 18.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

MILES: 1 0 1

FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS: 1 0 1

3	4	5
7		9
	11	12

3 BRIDGEPORT
4 WOODBURY
5 RUNNEMEDE
7 WOODSTOWN
9 PITMAN EAST
11 ELMER
12 NEWFIELD

INDEX TO ADJOINING 7.5 MAPS

PITMAN WEST, NEW JERSEY
7.5 MINUTE SERIES
SHEET NUMBER 8 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

Joins sheet 4, Woodbury

Joins sheet 5, Runnemede

75° 07′30″ | 75° 05′00″ | 75° 02′30″ | 75° 00′00″

39° 45′00″

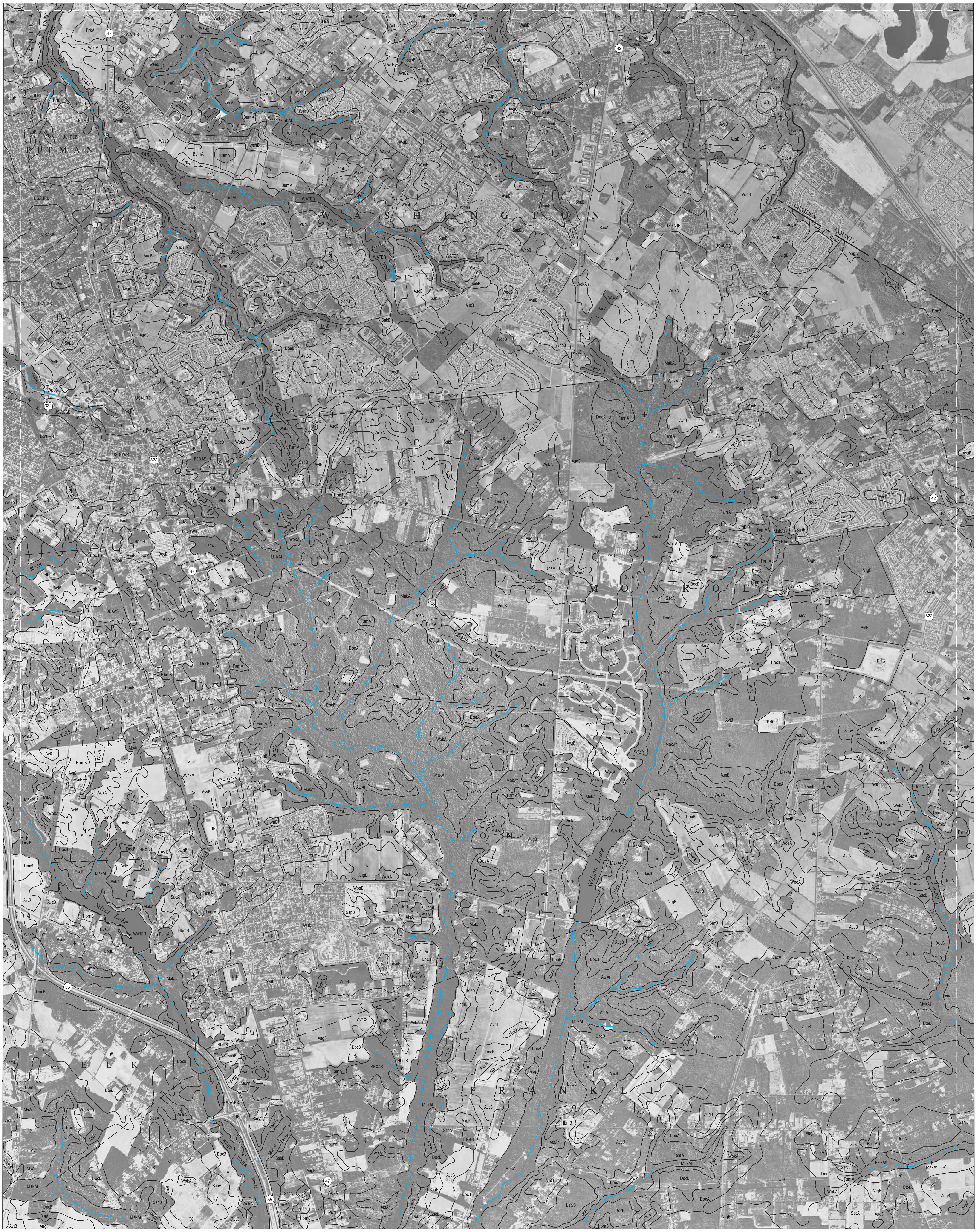
39° 42′30″

39° 40′00″

39° 37′30″

Joins sheet 8, Pitman West

Joins sheet 10, Williamstown



39° 45′00″

39° 42′30″

39° 40′00″

39° 37′30″

75° 07′30″ | 75° 05′00″ | 75° 02′30″ | 75° 00′00″

Joins sheet 12, Newfield

Joins sheet 11, Elmer

Joins sheet 13, Buena

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

4	5	
8		10
11	12	13

4 WOODBURY
5 RUNNEMEDE
8 PITMAN WEST
10 WILLIAMSTOWN
11 ELMER
12 NEWFIELD
13 BUENA

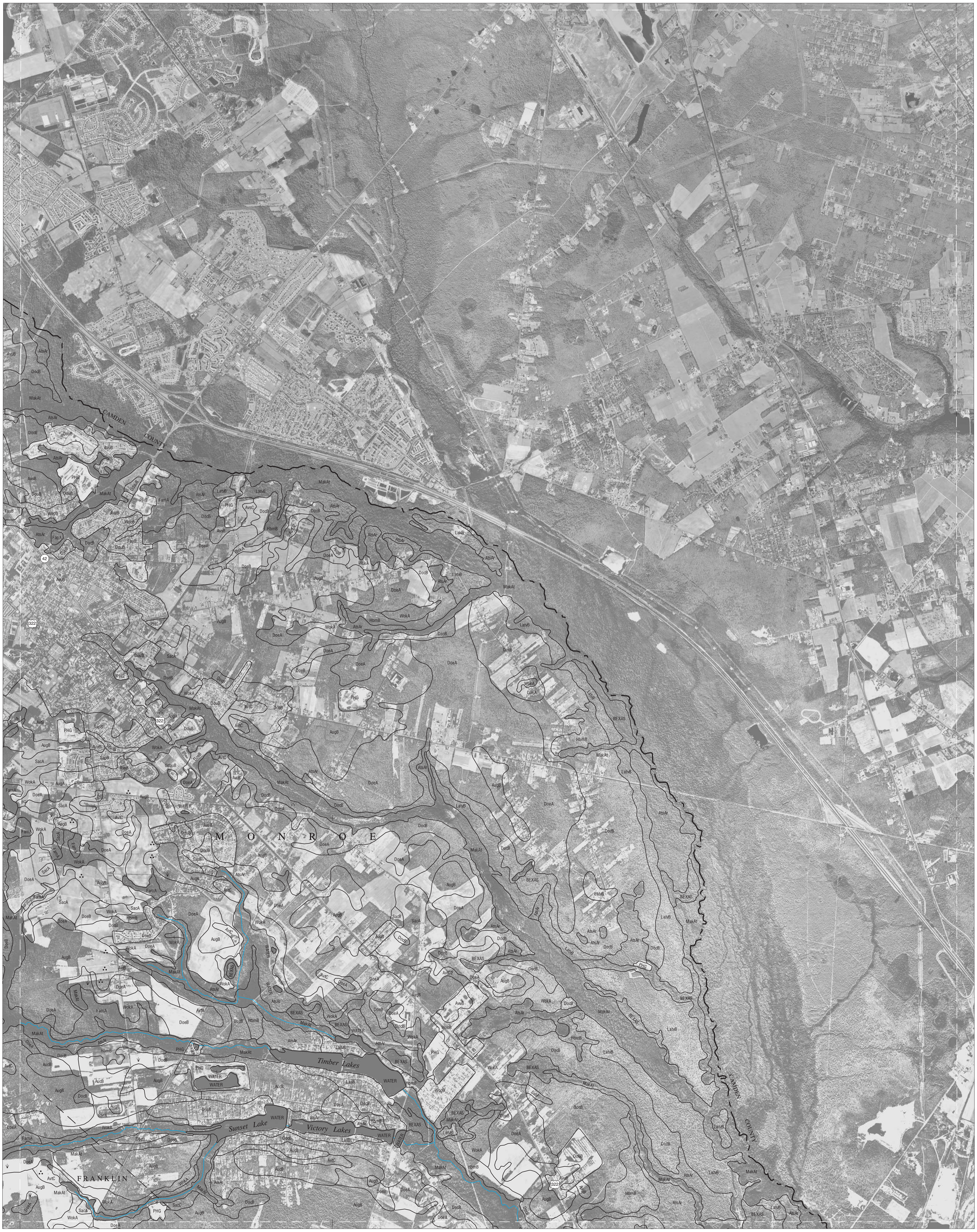
INDEX TO ADJOINING 7.5 MAPS

PITMAN EAST, NEW JERSEY

7.5 MINUTE SERIES
SHEET NUMBER 9 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

Joins sheet 5, Runnemede



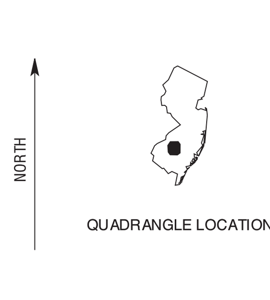
Joins sheet 9, Pitman East

Joins sheet 12, Newfield

Joins sheet 13, Buena

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Soil lines were compiled on orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1995(1:24,000) aerial photography. The photo background for this map is an orthophotograph prepared by the U.S. Department of the Interior, Geological Survey, from 1995-1997 aerial photography. Hydrographic lines were developed by NRCS - New Jersey as a navigational aid, and should not be used for any other purpose.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.



QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

5		
9	■	
12	13	

5 RUNNEMEDE
9 PITMAN EAST
12 NEWFIELD
13 BUENA

INDEX TO ADJOINING 7.5 MAPS

WILLIAMSTOWN, NEW JERSEY

7.5 MINUTE SERIES
SHEET NUMBER 10 OF 13

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

Joins sheet 7, Woodstown

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
ELMER QUADRANGLE
SHEET NUMBER 11 OF 13

Joins sheet 9, Pitman East

Joins sheet 8, Pitman West

Joins sheet 12, Newfield

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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 18.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

7	8	9
		12

7 WOODSTOWN
8 PITMAN WEST
9 PITMAN EAST
12 NEWFIELD

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ELMER, NEW JERSEY
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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
NEWFIELD QUADRANGLE
SHEET NUMBER 12 OF 13

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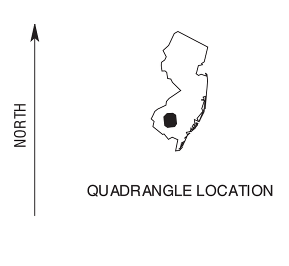
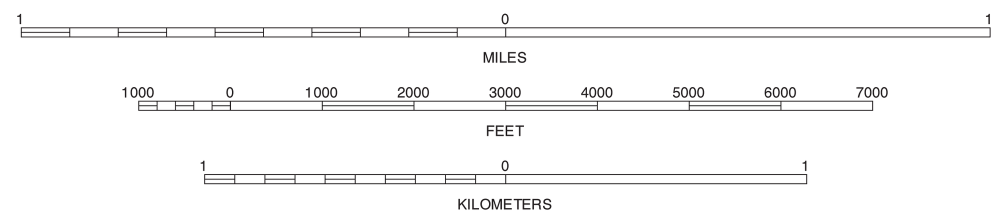
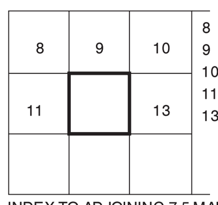
North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.







8 PITMAN WEST
9 PITMAN EAST
10 WILLIAMSTOWN
11 ELMER
13 BUENA

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SHEET NUMBER 12 OF 13

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

GLOUCESTER COUNTY, NEW JERSEY
BUENA QUADRANGLE
SHEET NUMBER 13 OF 13

Joins sheet 9, Pitman East

Joins sheet 10, Williamstown

Joins sheet 12, Newfield

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 18. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quarterquadrangle.

NORTH

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

9	10	
12		

9 PITMAN EAST
10 WILLIAMSTOWN
12 NEWFIELD

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